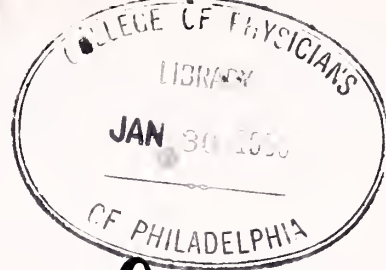


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Journal

★ **MEDICINE** *and* **PHARMACY** ★

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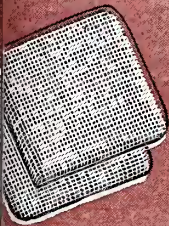
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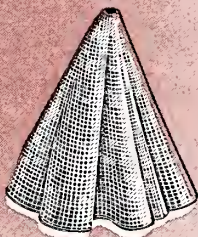
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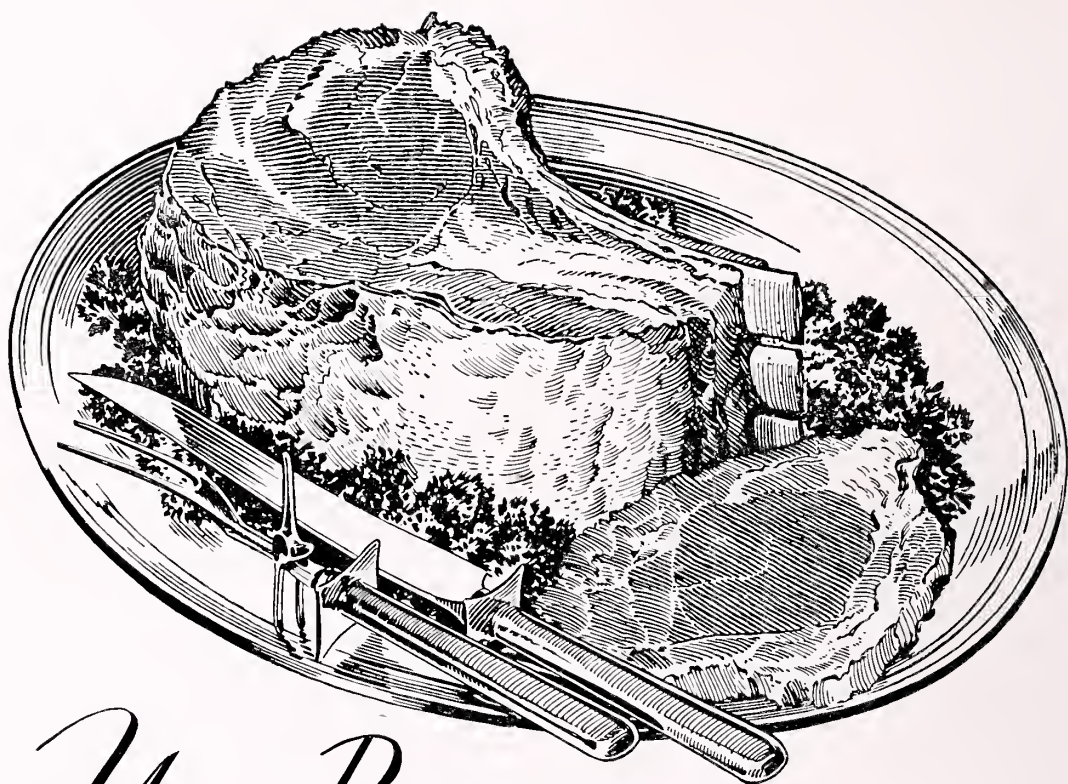


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*McLester, J. S.: Protein Comes Into Its Own, J.A.M.A. 139:897 (April 2) 1949.

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Histoplasmosis

A Review of the Recent Literature, and Presentation of Two Cases

John E. Harroun, M.D., Brookings, South Dakota

The study of two brothers with pulmonary calcifications and infiltrations, positive histoplasmin and negative tuberculin skin tests in South Dakota made it seem worth while to review the recent literature on histoplasmosis and report these cases. The significance of pulmonary infiltrations or calcifications associated with negative tuberculin skin tests and the inability to recover acid-fast bacilli from the sputum or gastric washings has long been a subject for speculation.¹ It is now established that fungus diseases, especially coccidioidomycosis^{2, 3} and histoplasmosis⁴ can cause pulmonary calcifications and infiltrations indistinguishable roentgenographically from pulmonary tuberculosis.

Darling⁵ first described the round or oval parasites in circulating monocytes and in reticuloendothelial cells throughout the body in certain cases of splenomegaly among natives in Panama. He advanced the name **Histoplasma Capsulatum** for this causative agent. De Monbreun in 1934⁶ reported the cultural characteristics of this fungus on Sabouraud's medium.

The number of reported proven cases of histoplasmosis (by cultural or microscopic methods) number less than 100. Parson and Zarafonitis⁷ reviewed 71 cases from the literature and added 7 more in 1945. Bunnell and Furcolow⁴ reported 10 proven cases in 1948. Kunstader, Whitcomb, and Milzer⁸ reported a case in 1949. Slabury⁹ reported two cases in 1949.

Reports in the literature until 1945 would lead one to believe that histoplasmosis is a uniformly fatal disease. As late as 1946 the section on histoplasmosis in Cecil's "Text-book of Medicine" states "There are no known recoveries." The typical patient was described as markedly emaciated, anemic, with splenomegaly, hepatomegaly, and leukopenia. He may or may not have a cough or diarrhea. The disease is said to run a down-hill course terminating within a few months to two years.

It is interesting to note, however, that of the 10 proven cases reported by Bunnell and Furcolow in 1948, five were still alive at the time of reporting. The case reported by Kunstader et al has apparently completed healing of his pulmonary histoplasmosis.

The cases described by Bunnell and Furcolow were diagnosed within a nine month period and were all located in or near Kansas City, Missouri. This would certainly lend support to the growing belief that histoplasmosis is neither as uncommon nor as fatal as it was previously thought to be. Diagnosis in these ten cases was made by histoplasmin skin tests, complement fixation tests, cultural and animal inoculation studies and chest x-rays. Tuberculin skin tests were also performed on all subjects. The histoplasmin skin test was positive in seven of the ten cases, complement fixation was positive in eight cases, roentgen examination of the chest was positive for infiltration or calcification in eight cases, and **Histoplasma Capsulatum** were cultured from the gastric washings of four patients. The authors stress the fact that the histoplasmin skin test may be negative in the presence of a high temperature or severe illness and that repeated testing and search for the causative agent may be necessary to substantiate the diagnosis. Both tuberculosis and histoplasmosis were demonstrated in two of the ten cases. Parson and Zarafonitis noted coexistent tuberculosis and histoplasmosis in four of the fatal cases reported in the literature.

Several recent reports have stressed the high incidence of histoplasmin sensitivity and the low incidence of tuberculin sensitivity in individuals with pulmonary calcifications. Christie and Peterson¹⁰ first noted this fact in children in Tennessee. Palmer¹¹ in 1946 reported the geographic differences in sensitivity to histoplasmin in approximately 10,000 student nurses from widely scattered areas of the U. S. A. He noted the incidence of histoplasmin sensitivity was high in those

states where there is a high incidence of pulmonary calcifications — namely in Illinois, Pennsylvania, Missouri, Kansas, Tennessee and Kentucky. Further studies by Palmer et al¹² confirm these early findings. Furcolow et al¹³ performed histoplasmin and tuberculin skin tests and chest x-rays on over 16,000 school children and 1,200 adults in Kansas City, Missouri. They found the incidence of histoplasmin reactors to rise from about 2 per cent at age two years to about 70 per cent at age 18 years in both males and females. The incidence in males increased steadily to about 90 per cent at age 37 and then decreased to about 65 per cent in the 60 to 65 year age group. In females it decreased from 70 per cent at 18 years to about 35 per cent in the 60 to 65 year age group. Positive reactions to the tuberculin skin test gradually rose to about 10 per cent among males and females at age 18 years, increasing rather rapidly thereafter to over 90 per cent in males at ages 55 to 60 and to about 88 per cent in females in the 60 to 65 year age group. The incidence of pulmonary calcification with positive histoplasmin and negative tuberculin reaction rose from 17.6 per cent in the youngest group (2 to 5 years) to about 30 per cent at ages 13 to 15. There was a slight decrease in the 16 to 18 year group but data in the older subjects indicates that the incidence of pulmonary calcifications associated with positive histoplasmin skin tests continued to rise with age. The frequency of pulmonary calcification was found to be over twice as high among reactors to histoplasmin alone as to tuberculin alone. In the Kansas City study, Furcolow, Mantz and Lewis¹⁴ also noted the character of pulmonary infiltrates associated with reaction to histoplasmin. These infiltrates were indistinguishable roentgenographically from pulmonary tuberculosis. That pulmonary infiltration or calcification is not pathognomonic of tuberculosis has been stressed by others^{14, 15, 16}. Furcolow found in Kansas City, Missouri that over 90 per cent of individuals with calcified pulmonary lesions reacted to histoplasmin and that an even higher percentage of those with otherwise unidentifiable pulmonary infiltrates were positive to the histoplasmin skin test.

The pathogenesis of tuberculosis has been well demonstrated. Development of the "primary complex" has been followed radio-

graphically from the stage of hilar enlargement through formation of peripheral subpleural infiltration and eventually to calcification or the so-called "Ghon complex." Sensitivity of the skin to tuberculo-protein develops shortly after hilar enlargement, probably about six weeks after the initial infection (pneumonitis). Kunstadter, Whitcomb and Milzer have confirmed the thought expressed by Furcolow et al that the primary phase of histoplasmosis is similar to that in tuberculosis. Thus, the case of Kunstadter et al was observed through the following course: originally seen about five days after onset of an apparent upper respiratory infection the patient, a twelve year old male negro, was found to have a positive histoplasmin skin test and negative chest x-ray. Recovery was uneventful and the patient was discharged after eleven days hospitalization. Eighty days after this episode the patient again became quite ill, spiked a temperature of 104 degrees and was hospitalized. At this time he was found to have signs of an upper respiratory tract infection and a large left mid-lung infiltration on chest x-ray compatible with a diagnosis of "atypical pneumonia." Blood culture at this time was positive for *Histoplasma Capsulatum*. Thirty days later chest x-ray revealed only about 50 per cent clearing of the pneumonic process. A chest x-ray taken 128 days after the initial infection revealed infiltration and calcification in the left mid-lung field. Because of the mildly positive histoplasmin skin test when first seen it was presumed the disease process had actually begun five or ten days previously.

CASE REPORTS

Case 1. R. J. V., 13 year old white son of a South Dakota farmer, was born in Harrington, Kansas and lived in or within sixty miles of Harrington until two and a half years ago when the family moved to their present home in Wentworth, South Dakota. His chief complaints were, (1) Generalized headache, present intermittently for years but which had gradually increased to daily occurrences, (2) Chronic fatigue and (3) Sharp, severe epigastric pain apparently unrelated to the headaches or food intake.

Family history revealed that the father was told he had a "healed" tuberculosis about ten years ago; he had been in excellent health

John E. Harroun, M.D., Article



Fig. I. Diffuse, miliary calcifications scattered throughout both lungs. Right hilar shadow is larger than normal.

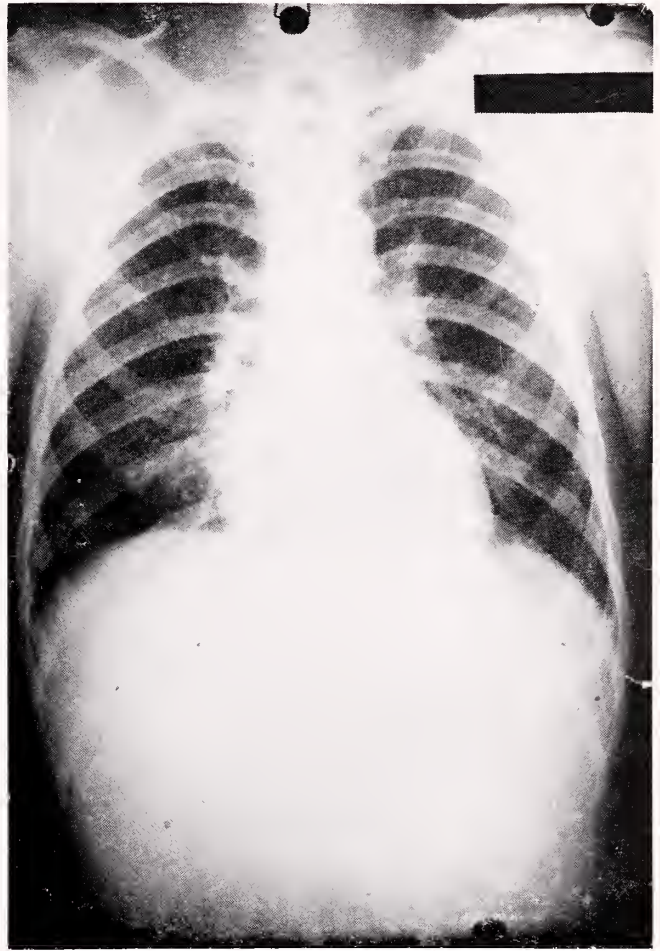


Fig. II. Diffuse, miliary infiltrations with slight calcification scattered throughout both lungs. Hilar shadows are bilaterally accentuated.

and had no complaints. The mother had been well. There was no history of allergy, cancer, diabetes or familial disease.

Chronological history revealed the usual childhood diseases with no sequelae. The mother stated that "for a number of years the boy had seemed to be always tired out." Even so, required tasks were always completed. Generalized headaches present intermittently for a number of years were stated to have greatly increased in frequency over the past year. The headaches were frequently associated with an emotional upset but they also occurred daily under calm conditions; they were apparently more frequent in the summer and were not associated with reading. Aspirin relieved the headaches as did lying down for awhile. The attacks of sharp, severe epigastric pain were becoming more frequent and occurred at any time of day. There was no relief with food, nor did eating seem to cause the pain. Relief could be obtained by lying down on either side but not on the back or stomach.

Physical examination was essentially negative except for slight epigastric tenderness in the mid-line just above the umbilicus. The temperature on several occasions was normal. The red blood cell count was 4.22 million per cubic millimeter, white blood cell count was 8,650 per cubic millimeter, sedimentation rate (Westergren) was 8 mm. in one hour at normal room temperature and the urinalysis was negative. Sputum examinations were negative for acid-fast bacilli. The tuberculin skin test was negative at a 1:1000 dilution. Histoplasmin skin test with a 2:1000 dilution was positive at 48 hours (an area of erythema 30 mm. in diameter, induration 15 mm. and a papule formation of 5 mm.)* The chest x-ray revealed diffuse small rounded infiltrations and calcifications scattered throughout the parenchyma of both lung fields.

* The histoplasmin was kindly supplied by the U. S. Public Health Service. The technique for performing this test is similar to the Mantoux test. One-tenth millimeter of a 2:1000 dilution is given intradermally. Readings are made at 48 hours. Both erythema and induration are recorded. A reaction of five or more millimeters induration is considered positive; the reaction is graded one plus for each five millimeters of induration.

Case II. Richard V., a ten year old brother of R. J. V. was born in Emporia, Kansas in which area he lived until the family moved to Wentworth, South Dakota, two and one-half years. He had no complaints and was apparently in excellent health.

The physical examination showed no abnormalities. The routine roentgen examination of the chest revealed diffuse scattering of calcified lesions throughout the parenchyma of both lung fields. The tuberculin skin test at a 1:1000 dilution was negative. The histoplasmin skin test at a 2:1000 dilution was positive at 48 hours (erythema and induration 10mm.) The parents did not want further laboratory tests because of the fear of worrying the boy.

The roentgen examination of the chest of the father revealed normal lung shadows without calcifications.

DISCUSSION

From the standpoint of exposure the lungs are in a doubly precarious situation in relation to the disease state. The organisms or injurious agents of the air may traverse the respiratory passages and so gain access to the bronchi or alveoli thence to lung parenchyma. Bacteremia permits filtering of organisms through capillary walls into lung parenchyma. The various "lines of body defense" in addition to the environment and pathogenicity of the causative agent will alter the incidence as well as the severity of pulmonary affections.

Although the x-ray is an indispensable laboratory procedure in the diagnosis of chest diseases, it must be weighed in the light of the case history, physical examination and associated laboratory tests as suggested by the history or physical findings. It has been well demonstrated that dust exposure, neoplasm, either primary or metastatic, sarcoidosis, disseminated bronchopneumonias and fungus diseases may be indistinguishable by x-ray alone from the infiltrates of pulmonary tuberculosis. Care must therefore be taken to consider those conditions which simulate pulmonary tuberculosis roentgenographically.

Thus, the various skin tests have greatly aided in differentiating pulmonary diseases. Proper sputum and gastric washings are indispensable to the practitioner of today. The demonstration by Furcolow et al of **Histoplasma Capsulatum** in gastric washings

should further increase the value of this procedure in differential diagnosis of lung disease.* Blood culture as shown by Kunstadter et al, utilizing either Sabouraud's medium, beef blood agar or beef infusion broth may aid in explaining cases of "atypical" or "viral" pneumonia that have prolonged infiltrations as shown by x-ray. Darling first diagnosed this disease by finding *Histoplasma Capsulatum* in circulating monocytes. Complement fixation studies must be interpreted in the light of the course and stage of the disease process. The complement fixation test probably becomes negative in histoplasmosis several months after the initial infection.

The course of fatal histoplasmosis has been adequately described. The course of benign histoplasmosis is now in the process of elucidation due to the excellent work of Christie, Peterson, Palmer, Furcolow et al. It appears certain that future work will support Kunstadter et al in recording the course of benign histoplasmosis from the stage of negative chest x-ray to the formation of pulmonary calcification.

In the cases reported in this paper the diagnosis of benign histoplasmosis seems most likely for the following reasons: (1) Lack of tuberculosis contact history (the father had been erroneously told of "an old, healed tuberculosis" because once stigma of healing, fibrosis or calcification, develop they are irreversible). (2) Negative Mantoux tests. It is unlikely that both patients had tuberculosis and then developed biologic sterility; this is strengthened by the presence of soft infiltrates in the case of R. J. V. which should theoretically be accompanied by allergy if tuberculous. (3) Positive histoplasmin skin tests, two and three plus, assume greater importance because of explanations 1 and 2. (4) Negative sputum examinations may be found in miliary tuberculosis but the lack of family tuberculosis contact and negative Mantoux tests are adequate to rule out tuberculosis. (5) Symptoms for which R. J. V. was originally seen were on a tension basis and have disappeared with therapy.

The U. S. Public Health Service is planning a cooperative study in a number of universities across the country in an effort to get a better picture of the geographic incidence of histoplasmosis. South Dakota State College at Brookings, South Dakota, has been included in this study so that we may have some idea as to the incidence in South Dakota. This study may tend to center attention upon various focal spots of high incidence in the United States. Until more is known of the pathogenesis of this disease it must be suspected when the characteristic picture is present, no matter what the locale. It may be found, as with coccidioidomycosis, that only a casual visit to an endemic area is sufficient to contract the infection.

SUMMARY

1. A review of the recent literature on histoplasmosis is presented.
2. Two brothers with pulmonary calcifications and positive histoplasmin and negative Mantoux tests are described.
3. Histoplasmosis must be considered in the differential diagnosis of all cases of persistent pulmonary infiltrations especially in the presence of negative Mantoux and sputum tests.

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* To be cultured on Sabouraud's medium at room temperature or on beef blood agar at 37 degrees C. Cultures are to be kept at least 3 weeks.

(Continued on Page 12)

Cancer of the Uterus; It's Earlier Diagnosis and More Effective Treatment

by Howard B. Hunt, M.D., F.A.C.R., E. Stanley Pederson, M.D., Ph.D.
and Robert M. Coleman, M.D., Omaha, Nebraska*

Cancer of the uterus is one sector in the fight against cancer wherein considerable progress has been made, through lay education and better management during the past few decades. Even so, fifty women died from cancer of the uterus in South Dakota and 136 in Nebraska during 1948. The educational program of the American Cancer Society has publicized the effects of "irregular bleeding or discharge from any natural body opening" as a sign of possible cancer. Doctors are now examining the cervix and uterus of all women complaining of abnormal vaginal discharge or bleeding, especially when occurring between the normal periods or past the menopause. The ease of biopsy and preparation of cytological smears, and the ready availability, by mail at least, of expert opinion for histological diagnosis have made possible the early diagnosis of cancer of the uterus by every examining physician. Therapeutic accomplishments have improved and are continuing to advance in both radiotherapy and radical surgery. The complications of treatment have been reduced through maintenance of normal physiology, use of antibiotic drugs for control of infection, and improved skill and clinical judgement in the application of therapy.

Carcinoma of the cervix uteri constitutes about 65 percent, and carcinoma of the endometrium about 15 percent of all cancers of the female generative tract, while cancer of the ovary constitutes about 15 percent, and cancer of the vulva and vagina less than 5 percent of the total.

Cancer of the cervix is more common than cancer of the endometrium at all ages, but it is relatively more frequent before the menopause, showing its peak incidence at about forty-eight years and occurring occasionally under thirty years of age. Carcinoma of the endometrium, that is cancer of the corpus uteri, shows its highest incidence at about sixty years of age and characteristically occurs in obese, often hypertensive, women.

Cancer of the endometrium is essentially adenocarcinomatous and varies greatly in rate of growth and degree of malignancy from the relatively benign adenoma malignum to the fulminating anaplastic carcinoma with early metastases. Therefore, duration of symptoms is not always a reliable prognostic index.

Cancer of the cervix usually originates in the squamous epithelium of the face of the cervix at its junction with the columnar epithelium of the canal, being of squamous cell type in 93% of cases. In its inception the microscopic lesion is non-invasive and limited to the epithelial layer, so-called carcinoma in situ. Such pre-invasive cancers are usually symptomless, showing abnormal bleeding in about one out of four cases. As the lesion extends, it may present an exophytic mass, an ulcerating crater or a firm induration in the cervix. The cervical canal gives rise to adenocarcinomas which may cause endocervical necrosis, evident on probing or curettement, but without any change being apparent on the face of the cervix.

The symptom which most commonly brings the patient with cancer of the uterus to the doctor is abnormal bleeding. The bleeding is usually intermittent and irregular, progressively increasing in frequency and amount and often precipitated by coitus or mild trauma. Bleeding usually follows instrumentation, scraping the cervix, or probing of the uterine canal. Bleeding has usually been preceded by or is associated with a seropurulent or serosanguinous leucorrhea. In 25 percent of corpus and 15 percent of cervix carcinoma, leucorrhea is the only symptom. Pelvic masses and pain through the pelvis, flanks or anteromedial aspects of the thighs are symptoms of advanced carcinoma of the uterus. Pregnancy is occasionally associated with cancer of the cervix; and if

* From the Departments of Radiology and Oncology of the University of Nebraska, College of Medicine, and the Nebraska Methodist Hospitals.

under four months gestation, spontaneous abortion usually occurs about two weeks after institution of deep X-ray therapy.

The cytological smear, as developed by Papanicolaou and now used by Dr. E. Stanley Pederson in our own department during the past year, has proven particularly valuable in apprehending carcinoma of the endometrium and pre-invasive carcinoma of the cervix. It has shown an accuracy of about 90 percent; giving false negatives chiefly in necrotic, badly infected lesions, and in smears obscured by blood. These are usually obvious gross lesions from which tissue sections are readily obtained. False positives have been very rare, although the cytology may be confusingly altered by hormones, radiation, pregnancy, recent abortion and severe chronic endocervicitis. Such clinical data should be submitted to the cytologist, together with smears. Reliable diagnostic evaluation of a Papanicolaou smear requires special training and knowledge in cytology and its modifications. A cytological smear taken from the posterior vaginal fornix provides a random sampling from the entire genital tract, and is, thereby, valuable as a screening test for cancer detection and as a procedure preliminary to tissue section. The smear should always be repeated when reported negative in the face of clinical findings suggestive of cancer.



Fig. 1. Equipment for making vaginal and uterine cytological smears and cervical biopsy as an office procedure.

The technique of preparing and fixing the cytological vaginal smear is a simple office procedure requiring only a vaginal speculum,

a tongue blade and a bottle of half 95 percent alcohol and ether. Care should be taken to minimize bleeding prior to taking material for smears and no lubricant should be introduced. Secretion containing desquamated cells is wiped from the posterior fornix with one end of a sterile tongue blade and spread over a slide with the gloved finger tip. The external os of the cervix is gently scraped in a circular fashion with the other end of the tongue blade and the material spread on a slide. In case adenocarcinoma of the endometrium is suspected, a sterile small blunt curette or laryngeal cannula fitted with an aspiration bulb may be passed through the endocervix and a small amount of material drawn out for smear. Immediate fixation in the alcohol-ether mixture must be done before any drying occurs. The smears may be sent to the laboratory in the bottle of fixative or removed after about an hour, dried, and covered with glycerin or cotton and mounted face to face for mailing. Immediate staining and examination permits prompt reporting of results. Final confirmation of the cytological diagnosis by tissue section always precedes institution of therapy, and a negative report must not be construed as a definite exclusion of carcinoma.

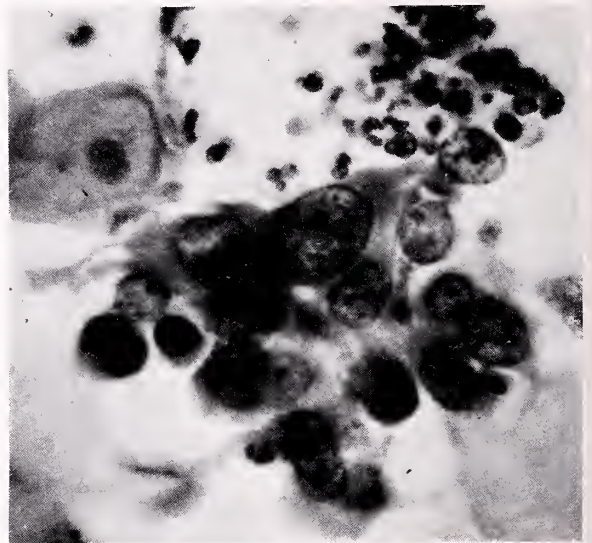


Fig. 2. Cytological smear, Carcinoma of Cervix—Variation in cell size with both relative and absolute nuclear enlargement, hyperchromatism and bizarre chromatin patterns.

Biopsy of the cervix can usually be conducted as an office procedure, particularly with the aid of a simple biopsy forceps or an Ayre's knife. No anesthetic is needed and

bleeding is negligible, being readily controlled by hemostatic cotton. Biopsy of all obvious ulcerated or indurated lesions of the cervix is indicated with immediate fixation in Zenker's or formalin. Lack of staining with Lugol's may be used to indicate area for biopsy. Carcinomatous tissue has a characteristic consistency, a type of caseous crispness which permits even a dull biopsy punch to cut through it readily in contrast to the fibrous toughness of an inflammatory lesion of the cervix, such as an erosion or a cervical polyp. Biopsies can be taken with the electro-surgical loop, although there is often considerable charring and distortion by heat. The endocervical cytological smear will apprehend carcinoma of the endometrium in about 90 percent of cases, but diagnostic curettage should be done whenever this lesion is suspected. Diagnostic curettage is most satisfactorily done in the hospital under anesthesia, and is indicated in all patients with a normal appearing cervix who present intermenstrual or postmenopausal bleeding, except possibly that attributable definitely to withdrawal of estrin or stilbesterol. To be sure, various benign lesions, such as endometrial polyps, submucous fibroids, uterine arteriolar sclerosis, the rare granulosa cell tumor of the ovary and systemic hemorrhagic states will account for about 40 percent of postmenopausal bleeding, but the most common cause is carcinoma of the endometrium. Carcinoma of the endometrium is associated with fibroid tumors of the uterus in at least one-third of cases, which should emphasize the need for exclusion of cancer before proceeding with operative removal or deep X-ray therapy for the supposed fibroid tumor.

Carcinoma of the cervix spreads outward along the surface of the cervix onto the vaginal mucosa and into the parametrial tissues. Lymphatic spread may extend laterally to the obturator nodes or outward and upward to the hypogastric and iliac nodes and on to the periaortic nodes. The ureteral nodes may or may not be involved early. Lymphatic extension may also occur posteriorly through the uterosacral ligament to the sacral nodes and from there upward along the periaortic nodes. Isolated metastases to pelvic nodes occur occasionally, but distant metastases are rare, being seen only in about 5 percent of cases. The most common cause of death in

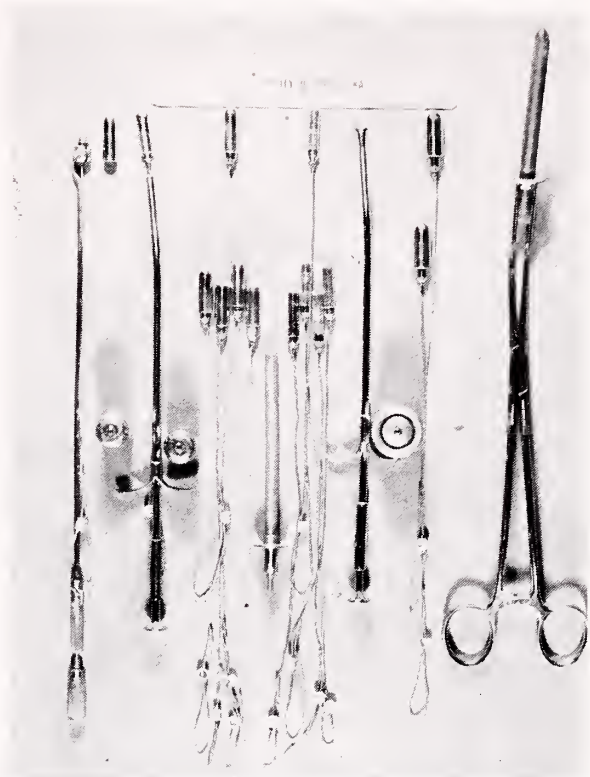


Fig. 3. Selection of radium applicators utilized in the treatment of carcinoma of endometrium.

both treated and untreated cancer of the cervix is ureteral obstruction terminating in uremia and resulting from direct parametrial invasion or compression by metastatic involvement of ureteral nodes. Hemorrhage, infection, intestinal obstruction and remote metastases are other causes of death. Early direct parametrial invasion and involvement of the parametrial lymphatics has rendered this disease rather unsuitable for surgical removal by anything short of radical total hysterectomy with resection of lymphatics extending entirely to the pelvic wall. Carcinoma of the endometrium tends to remain localized in the uterus for a longer period and is, therefore, more suitable for surgical resection. Carcinoma of the endometrium tends to extend along the lining of the uterus, to infiltrate the myometrium and may eventually penetrate the serosa and become implanted on the peritoneum by direct extension. Carcinoma cells do occasionally pass along the fallopian tubes and metastatic involvement of the ovaries is not unusual. Metastases may spread along the lymphatics through the tubovarian ligament to the pelvic and periaortic nodes. Retrograde extensions

downward along lymphatics to the vaginal vault occur occasionally and give rise to submucosal implants distally along the vaginal tract. Distant metastases by way of the blood stream are more common and may reach the brain, bony skeleton or lungs.

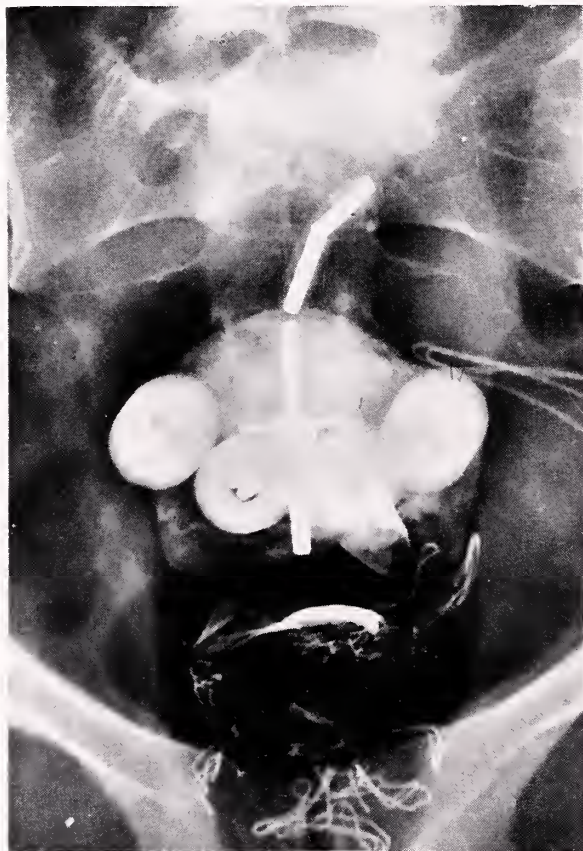


Fig. 4. Distribution of radium applicators in treatment to carcinoma of cervix uteri shown by routine radiographic films.

The degree of extension of cancer of the cervix is conveniently expressed as Stage I, II, III or IV. Two systems are in current use—the League of Nations and the Schmitz classifications. In this country the Schmitz classification is well accepted and has the advantage of subclassification of the earlier lesions. In Europe, staging is according to the League of Nations classification which provides for separation of the advanced lesions. In general, the League of Nations Stage I comprises both Stage I and II of the Schmitz system, while Stage IV League of Nations is a terminal lesion. According to the League of Nations, Stage I cancer is strictly confined to the cervix; the Stage II lesion is confined to the cervix, upper two thirds of the vaginal vault and the inner portions of the parametria, and

is comparable to Stage III Schmitz; Stage III League of Nations presents infiltration of parametria extending to the wall of the pelvis, limiting mobility of the uterus or infiltration of the vagina in its lower third, is definitely inoperable and Stage IV according to Schmitz' classification; Stage IV League of Nations shows either massive infiltration of both parametria or involvement of the bladder or rectum, or infiltration of the entire length of the vagina, or distant metastases. Stage I Schmitz is a lesion under 2 cms. in size, limited entirely to the cervix, while Stage II is also limited to the cervix but over 2 cms. in size or with involvement of the endocervix. For the most part, we have followed Schmitz' classification in the staging of disease. It must be admitted that any system of classification is arbitrary and is bound to reflect the experience and prejudices of the examiner. Classification according to stage of disease does provide a basis for the analysis of treatment and for the evaluation of results of therapy. Parametrial extension is best evaluated by a combined rectovaginal examination using the right hand for the right side of the pelvis and the left hand for the left pelvis.

Radiation therapy has been generally conceded as superior to surgery in the treatment of cancer of the cervix and has gradually gained favor during the past twenty years. The advancement of radiotherapy in cancer of the uterus is attributable to the pioneer work of Forsell, Heyman, Regaud, Hurdon, Janeway and many others. During the earlier period, surgery of the radical Wertheim type yielded absolute cures in not over 20 percent of all patients seen, with a five year survival in about 40 percent of patients operated upon. The radical panhysterectomy had the disadvantages of a very high operative mortality; 14.8 percent in 1,000 cases reported by Wertheim-Weibel in 1929, and yet was applicable to only about one-half of cases seen. This relative five year survival applies, of course, only to the League of Nations Stages I and II. The highest estimated absolute five year survival following radical operation is 25 percent, reported by Sir Victor Bonney in 1941, but his operative procedures carried an operative mortality of 15.8 percent. Garcia and Menville review the most favorable average operative mortality for radical pan-

hysterectomy at from 3 to 6 percent, and the average primary mortality from radiation therapy at 1.8 percent. There has been and still is a progressive improvement in the attainments of radiation therapy in cancer of the cervix and fundus uteri. At the Radiumhemmet in Stockholm, the absolute five year survivals increased from 21.6 percent for the period 1914-1931 up to 39.9 percent for the period 1932-1941. At the University of Nebraska Hospital, our absolute five year survival has increased from 20.5 percent in 73 cases from 1931-1936 up to 42.1 percent in 121 cases treated from 1937-1941. Our absolute five year survival rate covering all 69 cases treated by us in private practice at the Nebraska Methodist Hospital from 1932-1944 was 68.1 percent. The superior results obtained in the private group are attributed to the earlier stage of the disease, younger age of patients, and more individualization in management and treatment.

Interested in the surgical treatment of cancer has been reopened during the past few years by Morton, Meigs and Brunschwig. Morton, following the technique of Taussig, has advocated radical panhysterectomy plus lymphadenectomy done either independently or following radiation therapy. The incidence of positive nodes was reduced from 35.2 percent in the nonradiated group to 11.4 percent in those who had pre-operative radiation. Meigs has promoted an extra-peritoneal dissection of nodes from the obturator fossa and along the pelvic vessels in association with radical panhysterectomy, but limits his procedure to a highly selected group of favorable cases. He shows an absolute three year survival of 77.7 percent with very low operative mortality, but it must be borne in mind that these are Stage I cases, good risks and rela-

tively young women. Martindale from The Marie Curie Hospital, London, reports a five year survival in (League of Nations) Stage I of 82 percent and in Stage II of 60 percent of cases treated, which are equivalent to our own private five year survivals of 87 percent in combined Stages I and II (Schmitz) and 56 percent in Stage III (Schmitz). These radiotherapeutic absolute survivals compare favorably with Meigs best surgical results, even in selected cases. It must be emphasized that an ordinary total hysterectomy without removal of pelvic lymph nodes is entirely inadequate for the proper treatment of even a Stage I carcinoma of the cervix. In Meigs' series, about 20 percent showed nodal metastases, obturator and iliac nodes being the most frequently involved. Doubtless, there is justification for the treatment of pre-invasive carcinoma of the cervix in a young woman by hysterectomy, but we are inclined to feel that all clinically obvious carcinomas of the cervix are more safely and more effectively treated by properly administered radium and deep X-ray therapy than by surgery. Brunschwig has developed a radical pelvic viscerectomy which is applicable to carcinoma of the cervix infiltrating the bladder or rectum. By this procedure, the ureters are transplanted into the colon and an end colostomy is done followed by removal of the bladder and rectum along with the uterus and parametria. There is a definite need for super-radical procedures of this type in the case of uncontrolled cancer infiltrating bladder or rectum but still limited to the pelvic viscera.

Optimum treatment for carcinoma of the endometrium consists of pre-operative treatment by deep X-ray and fractionated radium followed by hysterectomy after six to eight

Improvement in Results of Radiotherapy in Carcinoma of Cervix Uteri

Author	Period	Therapy	Absolute 5 Yr. Survival
Smith & Dresser	1902-12	Radium alone	12.0 %
Massachusetts	1934-38	Radium plus X-ray	43.0 %
Heyman, J.	1914-31	Radium alone	21.6 %
Radiumhemmet	1932-41	Radium plus X-ray	39.9 %
Lampe, I.	1932-35	Radium plus X-ray	20-25%
Univ. of Michigan	1938-39	Radium plus X-ray	40-49%
Hunt, H. B., (U. of N.)	1931-36	Radium alone	73 cases 20.5 %
Univ. of Nebr., State	1937-41	Radium plus X-ray	121 cases 42.1 %
Private practice	1932-44	Radium plus X-ray	69 cases 68.1 %
Combined, State and Private Cases		Radium plus X-ray	190 cases 51.5 %



Fig. 5-a. Carcinoma of cervix (Stage II, Schmitz) before treatment by fractionated deep X-ray and radium therapy.

Fig. 5-b. Ten weeks later — carcinoma has been resolved, cervix is healed, and parametria are clear.

weeks. Adequate pre-operative irradiation will have eradicated the carcinoma in 60 to 90 percent of the operable cases, depending upon the original extent of disease and the radiotherapeutic procedure employed. The hazards of implantation and metastases at the time of surgical removal will have been definitely reduced, the tumor shrunken, and infection curtailed. Some of the more radiosensitive outlying extension will have been controlled. Surgical dissection will be found no more difficult within four to ten weeks following radiation, although it will become more difficult four to six months later due to adhesions, loss of cleavage planes and capillary bleeding. Postoperative irradiation is much less advantageous, being limited to deep X-ray therapy and irradiation of the vaginal vault by transvaginal X-ray or vaginal radium. Radiotherapy would seem to be least essential in the low grade tumor without any particular enlargement of the uterus. Only 40 percent of carcinomas of the endometrium seen at the University Hospital have been suitable for hysterectomy due to the nonresectable extent of the disease, or the obesity, cardiovascular disease or poor general condition of the patient. Residual carcinoma has been found in only 10 percent of the uteri removed following treatment by multiple intra-uterine applications of radium combined with deep X-ray therapy. Deep X-ray therapy alone will eliminate carcinoma from not more than 15 percent of uteri, according to Miller. The absolute five year survival in our University series, including many inadequately treated and some terminal untreated patients, was 43.9 percent, but our improved present

methods of treatment promise a higher curability which should approach 60 percent absolute five year survival rate. We utilize the intrauterine packing technique devised by Heyman, which in his hands from 1933 to 1941 yielded a 61.9 percent relative five year rate.

The system of radiotherapy in use at our Clinic combines moderately intensive deep X-ray therapy with multiple applications of radium along the uterine canal and across the vaginal vault, all delivered over a period of three to four weeks. In the Stage I and II lesions, radium is by far the more important therapeutic agent, although results are definitely improved by judicious application of supplementary deep X-ray therapy. Deep X-ray therapy becomes most important in the Stage III and IV lesions, since much of the disease is beyond the effective range of radium. The concurrent application of deep X-ray and radium provides a more homogenous and intensive irradiation throughout the central zone of the pelvis. The early application of deep X-ray therapy and applications of radium to the vaginal vault prior to intra-uterine application of radium advantageously effects gradual shrinkage of the tumor mass, clearing of infection and lessening of hemorrhage. Shrinkage of the mass opens the cervical canal, facilitates intra-uterine insertion of radium with a minimum of trauma, and brings the periphery of the cancer into a closer and more effective dosage range of the radium. Fractional application of radium has a further advantage in reducing infection and permitting adjustments of dosage according to the patient's tolerance. The application of radium can be made either under a light general anesthetic or under sedation. Two or three fractional applications of radium, spaced seven to ten days apart, do somewhat increase expense, but this is well compensated by better tolerance of the procedure by the patient and the final results attained. The radiotherapeutic management of carcinoma of the endometrium is quite similar to that for carcinoma of the cervix, except that we endeavor to bring radium into contact with all surfaces of the uterine cavity after the method of Heyman. In the normal sized uterus, a straight tandem—7 mms. in diameter—is usually effective, although additional capsules are packed into the cornua

and the entire cavity filled with individual capsules in the case of the larger uterus. Again, preliminary deep X-ray therapy and fractionation of radium gives the advantage of progressive shrinkage of the intra-uterine mass and makes the therapeutic range of successive applications more effective.

The medical management of sequelae following intensive irradiation of cancer of the uterus is of considerable benefit to the patient. Some degree of proctitis with diarrhea and intestinal cramps is anticipated in nearly all cases and is benefited by a mixture of paregoric and milk of bismuth, warm normal saline enemas (one level teaspoonful of salt to a pint of water), followed by instillation of cod liver oil into the rectum and administration of sulfasuccidine in some cases. Proctitis comes on during the latter period of, or directly following, therapy and usually subsides within a few days. Cystitis with dysuria and frequency are usually mild and respond to an increased fluid intake, or if more severe, to sulfadiazine and soda. Radiation sickness is to be avoided by keeping the daily dosage low enough to avoid anorexia, but in case of nausea and vomiting nembutal suppositories, pyridoxine and thiamine (25 mgs. each), are helpful plus intravenous 5 percent glucose in normal saline in case of dehydration. Daily vaginal douches of normal saline promote hygiene. Infarctive necrosis of the cervix with secondary infection may simulate recurrence, and is treated by cleansing douches, instillation of penicillin vaginal suppositories and (or) sulfanilamide suspension. Troublesome vaginal adhesions resulting from organization of fibrinous exudate in the vaginal vault can be avoided by having the patient use a long large douche nozzle and move it about in the upper vagina during douching. Skin reactions are rarely severe, except in some obese patients, and heal after a few days or weeks with avoidance of pressure, observance of hygiene and application of powder when dry or a bland ointment when vesiculated.

Ureteral obstruction must be remembered as the primary cause of death from cancer of the cervix, both in untreated and treated patients. It is suggested by a diffuse pain through the flank, costovertebral tenderness, and in case of associated pyelitis by chills and fever. An excretory urogram or ureteral

catheterization with pyelography is indicated. Relief may follow ureteral dilatation, but recurrent obstruction is common. Nephrectomy may be necessitated by pyelitis. Ureteral transplantation warrants consideration in case renal function is preserved, the other ureter is threatened and the disease is limited to the paracervical region, with some prospect of control by parametrial implantation of radium needles or radical pelvic viscerec-tomy.*

* Accomplishment of cytological studies and statistical analyses has been assisted by a grant from the National Cancer Institute, U.S.P.H.S. We are indebted to Dr. E. S. Pederson for his contributions to Cytological Diagnosis and to Dr. Robert M. Coleman and Mr. Walter Giles for valuable assistance in follow-up case studies and statistical analyses.

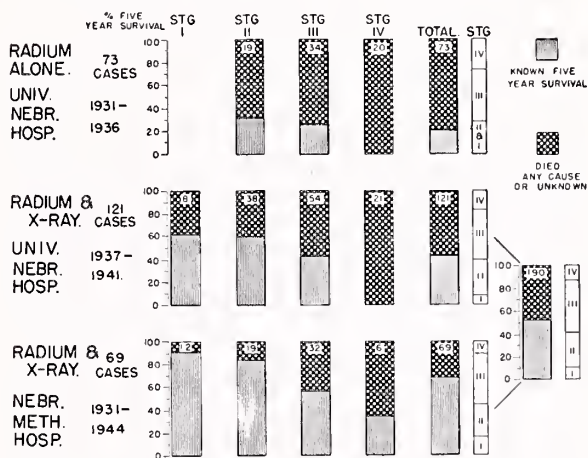


Fig. 6. Absolute five year survivals showing comparative results of treatment by radium alone, and by radium and X-ray combined; results for various stages of disease in state and in private practice.

SUMMARY

1. Cancer of the cervix and fundus uteri is so indicated symptomatically and so situated anatomically as to permit definitely earlier diagnosis by improved lay education and more adequate pelvic examination of all women with abnormal vaginal bleeding.
2. Earlier diagnosis of carcinoma of the uterus is now possible through a wider use of the vaginal cytological smear and cervical biopsy as ordinary office procedures. Diagnostic curettage should be done whenever carcinoma of the endometrium is suggested by clinical signs or symptoms.
3. The most effective treatment for carcinoma of the cervix is properly administered radium and deep X-ray therapy.
4. Comparative results from treatment of carcinoma of the cervix show absolute five year survival rates of 20.5 percent with radium alone, 42.1 percent with radium and deep X-ray in state cases, and 68.1 percent absolute five year survivals in all cases seen in private practice.
5. The optimum treatment for carcinoma of the endometrium is pre-operative deep X-ray and fractionated radium to be followed by radical pan-hysterectomy after six weeks in operable cases.

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CUFF NOTES

by Don Manning, M.D.

Minimum Postoperative Maintenance Requirements for Parenteral Water, Sodium, Potassium, Chloride, and Glucose.

In the normally hydrated adults 2 liters per day is an adequate fluid intake. Thirst is a good guide to the measure of water needs.

With no electrolyte intake the body rapidly conserves sodium and chloride, but not potassium and phosphate. It is estimated that 2 to 4 grams of a mixture of sodium and potassium chloride (or gluconate) will meet the minimum requirements. Elmen et al. *Annals of Surgery*, Oct. 1949.

An Evaluation of Oxygen Therapy

The value of oxygen as a therapeutic agent was tested directly in animals by having them breathe air and oxygen alternately.

In shock produced by hemorrhage, burns, intestinal obstruction, peritonitis, crushing, and histamine injection 100% oxygen did not result in either clinical improvement or increased oxygen consumption.

Likewise in central circulatory failure produced by tamponade, it could not be demonstrated that breathing oxygen had any advantage over breathing air.

However when respiration was definitely embarrassed by central depression, tracheal obstruction, prolonged inspiratory resistance, pneumothorax or constriction of the chest or abdomen, oxygen therapy was of demonstrable value. These animals showed clinical improvement, and the total oxygen uptake was increased. Pice et al. *Annals of Surgery*, Oct. 1949.

Gleanings

During World War Two 18,500 members of the armed forces had amputations. In the same period 80,000 civilians had amputations. The annual rate at which new amputees are added to this number is estimated at 30,000, and the numbers have been steadily increasing.

Diversity of Gouty Arthritis and Its Complications

The onset of symptoms may appear in the first decade of life or as late as the eighth decade.

At the time of the first attack X-Ray

(Continued on Page 16)

Lateral Spinal Curvature (Scoliosis) in Children

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An increasing number of lateral spinal curvatures are being observed in this area following the severe poliomyelitis epidemics of recent years. The condition is admittedly a difficult one to treat. Treatment is most effective in the younger children where the deformity is not fixed and the back is not rigid. Failure to recognize the condition early and to treat it promptly and effectively frequently results in increasing deformity. When the skeleton has matured to the adult state little can be done to correct the deformity.

Although poliomyelitis is a common of-

fender as a cause of scoliosis, the latter can also result from other conditions. Some cases are hereditary in origin; some are associated with the condition of neurofibromatosis. Diseases of the chest, such as an old empyema, may give rise to a curvature. The so called "idiopathic" cases are often due to an unrecognized attack of poliomyelitis which has resulted in muscular weakness on one side of the back, the opposing muscles of the other side being unaffected. Primary defects in the vertebrae themselves, such as hemivertebra, are not the usual findings. Secondary



Fig. 1: Early scoliosis seen at six months following an attack of poliomyelitis. Previous treatment had consisted in three weeks hospitalization at the time of the acute illness. Roentgenograms taken with the patient standing equally on both feet.



Fig. 2: Correction obtained with plaster jacket shown in the standing position as previously.



Fig. 3: Uncompensated primary thoracic curve which had become worse despite good conservative treatment. Note the wedge-shaped deformity of the vertebral bodies which will prevent complete correction.

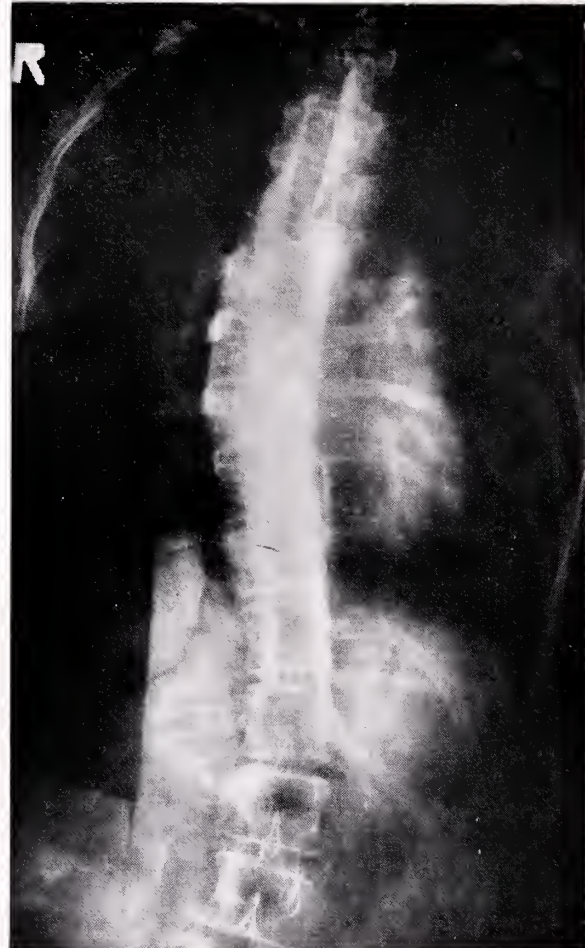


Fig. 4: Postoperative spinal fusion in same case following maximum preoperative correction of curve and compensation. Preserved homograft bone was used in spinal fusion to reduce operative time and shock associated with removal of extensive bone grafts. Note change in position of heart shadow after correction, as compared to Fig. 3.

changes, however, do occur as a result of unequal pressure on the growing bone. The increased weight borne on the inner (concave) side of the curve inhibits bone growth here (Fig. 3); on the outer (convex) side of the curve the increased pressure is absent so that bone growth proceeds at its usual rate to produce a wedge-shaped vertebra. In some cases (e.g. Fig. 5) the primary cause lies in the lower extremity where the leg may be short or otherwise affected.

The first symptom is deformity. At the onset one shoulder or one hip is usually more noticeable than the opposite. Frequently the condition is first noticed when the child is fitted with new clothes. The mother is usually disinclined to accept the salesman's suggestion that a difference is present between the

two sides of the back. Later, when the deformity has progressed, the child is brought to the doctor. If concrete recommendations are not made, the child drifts from one practitioner to another; nothing is accomplished and the deformity becomes worse, even terminating in the typical hunchback stage.

With the increasing curvature the heart and lungs are progressively affected. The aorta likewise becomes curved to follow the curve of the spine, regardless of the severity of the deformity. There are usually marked changes in the size, shape and position of the heart in severe cases. Improvement in the scoliosis as a result of treatment likewise improves the position of the heart (Figs. 3-4). Many patients have dyspnea and rarely some are cyanotic and edematous. The majority of

severe cases usually die of cardiac or pulmonary complications.

Pain is not a usual feature during childhood. Occasionally a youthful patient may complain of some aching in the back. Usually it is not until adult life that real pain appears, associated with roentgenographic findings of hypertrophic arthritis of the affected vertebra.

The diagnosis of the condition is not difficult if it is kept in mind. In every physical examination the spine should be inspected with the patient standing, and also bending over with the knees straight, as to touch the finger tips to the toes. The latter maneuver will frequently bring out an early curve not otherwise evident. Roentgenograms should be taken with the patient standing. Invariably the curve is more pronounced on

roentgenographic than on clinical examination. An increased antero-posterior curvature is usually noted in the lumbar region.

Prophylaxis of spinal curvature is not often practical except in poliomyelitis. Poliomyelitic paralysis of the trunk and abdominal muscles requires six months of non-ambulatory treatment in the usual case, the patient remaining on a stiff mattress most of the time. Particular care must be taken to evaluate the muscular involvement in all cases of poliomyelitis, since a slight unilateral paralysis or weakness is easily overlooked.

Proper treatment and a good result are dependent on the cooperation of the parents and the patient; this point must be emphasized particularly to the parents. Treatment should not be undertaken without this thorough understanding.



Fig. 5: Lumbar curve and pelvic obliquity following poliomyelitis. Previous treatment had included ten-and-a-half months hospitalization at a well known poliomyelitis institute.



Fig. 6: Postoperative result obtained in same case (Fig. 5) following division of shortened left iliotibial band and lateral intermuscular septum at a point two inches above the left knee. Operation on the spine should never be done in this type of case, in contrast to case shown in Fig. 3.

If further observation and treatment are decided upon, marked spine photographs are made. The spinous processes are marked with black ink with the patient standing, thereby making the curve readily visible in the picture. These photographs are of considerable value in determining the progress of the deformity at a later date.

The cause of the curvature should be determined if possible. If the deformity is secondary to a short leg or other leg pathology, appropriate measures should be taken (Figs. 5-6). Epiphyseal stapling is a safe and effective procedure in properly selected cases to inhibit the growth of the long leg and to permit the short leg to gain equal length. In case of leg inequality of more than an inch, an elevated shoe will of temporary value in correcting the secondary spinal curvature.

If an inequality of the muscle balance of the back is the cause of the deformity, the course of treatment is dependent on the progress of the deformity. Corrective exercises may be given which, if followed regularly, will aid in the restoration of muscle equality. A mild curvature is not incompatible with good health and well being. In such cases the patient, having been given corrective exercises, is observed at six week intervals; marked spine photographs and roentgenograms are taken each time for comparison with the previous ones. If the deformity appears to improve or remain stationary, nothing further need be done. With slight progression of the curve a corrective Hauser type of plaster jacket is sometimes helpful in controlling the deformity. If the deformity rapidly progresses despite all conservative treatment, correction of the primary curve and spinal fusion of an appropriate area is the only recourse. The results with operation are good, providing correction of the curve and derotation is established preoperatively.

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CUFF NOTES

(Continued from Page 12)

evidence of osseous tophi or subcutaneous tophi or inspection is usually lacking.

The passage of urate stones or urate gravel may precede the first attack of gouty arthritis. Urate stones may be passed by persons who do not develop gouty arthritis subsequently.

Renal disease is the most important non-arthritis phase of gout.

Rheumatoid arthritis and gout may appear in the same patient. Each disease must be treated independently. This may be done without aggravating either condition.

Colchicine 0.5 mg. per hour for acute attacks, maintained until onset of G I distress. Colchicine then stopped and paregoric given. John H. Talbot, *Annals of Int. Med.*, Oct. 1949.

Aureomycin in Acute Infectious

Mononucleosis

Infectious mononucleosis is a self limited disease lasting a few weeks to a few months. The average duration of illness being about 14½ days. Cases with prolonged courses are those with some type of respiratory infection added and with a marked degree of tonsillar and pharyngeal exudate.

Course of disease may be limited by following dosage schedule.

First day	2.75 gm during 24 hours
Second day	2.0 gm
Third and fourth	1.5 gm
Fifth day	1.0 gm

Results — Significant drop in temperature; Spleen no longer palpable; Less toxic; Less swelling of cervical glands.

B. J. Gruskin, *Annals of Int. Med.*, Oct. 1949.

Vaginal and Cervical Smears in Uterine

Malignancy

The advantages of the smear technique are: 1. smears can be repeated frequently without subjecting the patient to repeated biopsy or curettage; 2. preinvasive carcinomas can be diagnosed in grossly innocent appearing cervixes; 3. local recurrences can be detected before clinical findings would be positive; 4. as a screening process it is the quickest and least expensive for the patient. The disadvantages include the staining technique which is long and which has not been completely perfected and also special training in cytology is necessary for interpretation of the smears. Schram, Maxwell and DiPalma, *Am. J. Surg.* 1949, 77:191.

(Continued on Page 38)

Rosebud Community Hospital at Winner, South Dakota

by T. Dean Crist

It is my great pleasure to be given the opportunity to describe Rosebud Community Hospital and Clinic to the doctors of South Dakota through their medical journal. Your executive secretary, John C. Foster, is to be complimented on seeking the facts for publication among the physicians of this state. Perhaps through free delineation of facts we may possibly avoid the unfortunate controversy concerning consumer sponsored prepaid plans which has taken place elsewhere.

Rosebud Community Hospital is doing more than just establishing a \$300,000 hospital, a sizeable task in itself; it is at the same time providing clinical services to the large trade area which will support it. The resident doctors of the state of South Dakota are naturally interested principally in the physicians services to be established by the new institution. We will try to make the facts about it short and to the point.

We plan to have a four place staff consisting of a general surgeon, an internist, an EENT man and a general practitioner. The staff of course is flexible, depending to a great extent on whom we can secure.

These men will be guaranteed so much for a year of service. Our experience so far indicates that for a recognized specialist the guarantee will be somewhere between nine and twelve thousand dollars per year. In addition to the guarantee the staff will receive 50% of the net income from the clinic. Rosebud Community Hospital, so far as the clinic is concerned, will act only as the collecting and accounting agency. All operations and affairs of the clinic will be in charge of the medical director and his staff. In other words the staff will operate the clinic.

The hospital-clinic has been designed as a workshop for physicians. The clinical wing, an integral part of the hospital, includes consultation and examining rooms for four physicians, a laboratory, central service and a waiting and admitting room. While the four physicians will constitute the resident staff

at the same time the hospital will be strictly and without question an open staff hospital. Any doctor licensed and therefore privileged to practice medicine in the state of South Dakota will receive every courtesy, right, prerogative and privilege. The chief concern of our staff will be to conduct and provide at all times an ethical institution for the fullest and most competent practice of medicine.

Rosebud Community Hospital is a voluntary membership organization. The sort of an organization on which the House of Delegates of the American Medical Association put its stamp of approval in June of this year. The chief business of this voluntary lay organization will be to run the hospital in such fashion that both the attending physician and the patient will receive the best and least costly care.

Each member of the organization has contributed at least \$100 in the form of a lifetime membership which entitles him and his family to one share and one vote only no matter how much greater than \$100 his total contribution. By reason of his contribution toward the construction and equipping of the hospital and clinic the member is privileged to pay dues each year according to the size of family. Such dues entitles a member family to receive all clinical services, including office visits, examination, treatment and surgery without further payment. Hospital care, bed, board, general nursing and accessory services will be at the expense of the member. We will advise our membership to take advantage of any of the various hospital insurance plans in order to complete their insurance against the cost of medical services of all sorts. In other words our chief objective is to afford prepaid medical services. Dues funds, the income from dues, will be used to provide the guarantee to our physician staff.

Non-members desiring medical services will pay a regular schedule of fees. Such

schedule of fees we plan to orient to the average going rate in South Dakota. That is we will charge so much, no more or no less, no matter to whom rendered for each service.

It should be noted that our objective is to provide prepaid service to members at cost. We are not interested in cheap medicine. In other words, the advantage to the member is not that he gets medical service for less but rather that he is privileged to pay for such medical service on an insurance basis rather than on the usual risk basis. The South Dakota Medical Association has rightfully recognized the risk in the cost of medical care and done something about it in the nature of the insurance plan which they offer through an accredited insurance company. We intend to do exactly the same thing except that we offer the service rather than the cash indemnity.

South Dakota physicians are naturally the most interested in the policy and professional ethics of our organization. This policy has been laid down for us by the Cooperative Health Federation of America of which our organization is a member and of which I am privileged to be a director. It would be well to incorporate here the salient features of the policy. I quote directly from "Cooperative Health Federation of America — Body of Policy:"

"The Cooperative Health Federation of America itself and those direct service plans which desire membership shall dedicate themselves to the following principles:

Preventive service of a type and kind that is in keeping with the most modern concept of medical and public health practice shall be made available as rapidly as possible to the persons covered by the plan.

Only that scope of service which they are prepared to deliver shall be promised by member plans, and members shall be advised of limitations of service.

Plans shall move as rapidly as possible toward complete medical care on a prepaid basis.

The quality of medical service shall be maintained at the highest possible level.

Official public utterances and organizational conduct shall be in conformity with accepted ethical standards of the

medical profession.

There must be no interference in the practice of medicine by the lay board. The traditional relationship of physician and patient must be preserved. Provisions to this effect shall be included in the by-laws of all member organizations.

In order that these aims may be effectuated, the Cooperative Health Federation of America and its member plans should work together to the end that the following policies may be followed throughout the organization:

1. The regular members of the staff of any plan shall comprise physicians who are:
 - a. Graduates of approved schools.
 - b. Licensed in the state in which they are practicing.
 - c. Who shall claim to be specialists only when eligible for membership in their specialty boards.
 - d. Whose appointment shall have been recommended by a majority vote of staff and approved by a majority vote of the board of directors.
2. The staff shall appoint a chief of staff who shall be a practicing member of the staff. It shall be the duty of the member so appointed to:
 - a. Represent the staff at meetings of the board of directors.
 - b. Enforce the by-laws of the staff.
 - c. See that the highest standards of diagnosis, treatment and care are applied by the staff to every person receiving service from the health plan.
3. The organizational structure of each plan shall be so designed that the sphere of influence of the organizational director and of the chief of staff shall not trespass one upon the other.
 - a. The organizational director shall be the executive officer of the board of directors and as such he shall have control of the business affairs of the health center.
 - b. The chief of staff shall be the executive officer of the staff, appointed by the staff, and as such shall be responsible for the activities of the staff.
 - c. The chief of staff shall have the right of direct appeal to the board of directors from decisions or instructions rendered by the executive director which in the opinion of the staff

jeopardize the professional standards of the staff.

4. The individuals constituting the medical staff of each member plan shall subscribe in writing to the following tenets:
 - a. The members of the staff as individuals and as a whole and on the behalf of all assistants and interns shall pledge themselves that in no case in which a patient is referred by an outside physician will they receive from or pay to the referring physician directly or indirectly any part of the fee for service to that patient.
 - b. The following shall be accepted as grounds for immediate expulsion of any staff member:
 - (1) Willful misconduct; gross negligence; incompetence; malpractice; repeated misbehavior in the performance of his duties.
 - (2) Conviction of any offense involving moral turpitude including violation of the narcotic laws.
 - (3) Habitual intemperance.
 - (4) Dishonesty including false advertising.
 - (5) Willfully betraying a professional secret.
 - (6) Neglect or refusal to cooperate with other members of the staff in performance of his duties.
 - (7) Repeated gross violation of the by-laws of the staff or of the contract between the staff and the corporation.
5. It is further understood that in order to promote the welfare of the staff, each member plan shall, if at all possible, incorporate the following points in its contract with the staff:
 - a. No physician may be accepted to full membership in the staff without having received a majority affirmative vote of the staff cast by secret ballot.
 - b. The staff and the cooperate organization shall create and approve a personnel policy to which both shall subscribe. This policy shall be called to the attention of all applicants before they accept staff positions. It shall among other things:
 - (1) Assure the staff that all matters involving questions of unprofes-

sional conduct shall be brought before the medical staff and the discharge on such grounds shall require a majority of two-thirds vote of the staff.

- (2) In matters not involving questions of unprofessional staff conduct, the case shall be judged by a committee consisting of an equal number of staff members and members of the board of directors. The defendant staff member shall have the right to designate at least one-third of the representatives on this committee selected from the medical staff. A majority vote of this committee shall be considered final.
- c. Everything possible shall be done to insure tenure of service of the staff, adequate retirement funds, adequate postgraduate study periods.
- d. There shall be adequate remuneration for the work done by the staff.
- e. The staff shall be required as a group to promote all measures such as clinical pathologic conferences, journal club meetings, staff rounds, which would actively improve the practice of medicine in that community.
6. It is also hoped that each health plan will, in consultation with the staff, do all in its power to promote better understanding of medical problems by the consumers of their service.

In order that the greatest possible validity be given to the attempt, on the part of the Cooperative Health Federation of America and of its several member groups, to prove the value of their approach to the organization of medical care, the following would appear to be essential:

- A. That complete hospital and clinical records be kept on forms acceptable to the American Hospital Association. That forms for these records be standardized throughout the organization.
- B. That accurate and adequate accounting systems be maintained throughout the organization and that these systems be standardized.
- C. That member plans agree to submit at regular intervals for study by a special

(Continued on Page 23)

Radiographic Examination of the Urinary Tract*

by Sister Viola

In a few fields of medicine or surgery has the roentgenogram been of more value than in the diagnosis of diseases of the urinary tract. In fact, with the proper utilization and proper interpretation of x-ray findings, the diagnosis of urology has rapidly become almost an exact science.

X-rays were first officially recognized in November 1895. The first attempt to utilize x-rays in the diagnosis of urological diseases was made by Tuffier, in 1897, and the first successful use of pyelography was reported by Voelker and Lichtenberg, in 1906. Since 1906, progress of the radiological study of the urinary tract has been almost phenomenal.

It shall probably be unnecessary to review the anatomy of the urinary tract. Let it suffice to say that it consists of two kidneys, two ureters, bladder and urethra, the latter varying greatly between the male and the female. In other words, the urinary or excretory system, as it is often called, may be divided into two systems: (1) the kidneys which produce the urine and the ureters which convey the urine to the bladder, and (2) the bladder which serves as a reservoir, and the urethra which conveys the urine to the exterior.

The kidneys are "bean-shaped" in structure and are located behind the peritoneum with the greater part of each kidney within the epigastric region. Their location may simply be described as the upper posterior part of the abdominal cavity. In most people the kidney pelvis is located at the level of the space between the transverse processes of the first and second lumbar vertebrae, the right slightly lower than the left. From this point each ureter extends downward with a slight inclination toward the midline. The normal ureters may be slightly wavy or straight in their abdominal course. They enter the pelvis anterior to the sacral joint and pass downward and forward, still slightly inclining medially to enter the bladder at about the level of the spine of the ischium.

The density of the kidneys is slightly greater

than that of the surrounding structures and it is important that their outlines be completely demonstrated on radiographs. The ureters and bladder are not so easily demonstrated under normal circumstances.

The function of the urinary tract is to excrete the nitrogenous and other products of metabolism brought to it by the blood and also to aid in keeping the composition of the blood constant. These waste materials, with the exception of hippuric acid, are not made by the kidneys but simply removed from the blood and excreted by the urinary system.

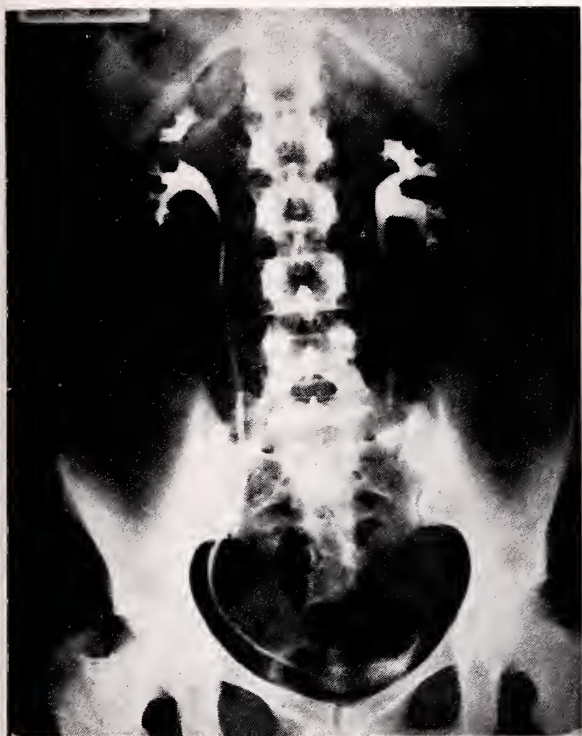
The kidneys are frequently the object of x-ray examinations. There are three methods of studying the urinary tract: (1) The K.U.B., or film of the abdomen, without contrast media; (2) Intravenous pyelogram, and (3) Retrograde pyelogram. The K.U.B. gives valuable information as to the presence or absence of x-ray opaque stones, position, size and outline of kidneys, and condition of the iliopsoas muscle outlines. It is used as a preliminary study to the other two examinations.

It is almost imperative that the patient be prepared for this examination. The usual technique consists of a high cleansing enema accompanied by some intestinal stimulant as pitressin. However, pitressin should be used with great caution, especially in those individuals suffering from cardiac diseases and hypertension. After the preliminary film, if objectionable gas shadows are found, an ampule of petressin without cleansing enema can be given with satisfactory results.

In addition to the cleansing enema, it is advisable to give a cathartic as desired by the attending physician. The patient should abstain from fluids for from twelve to fifteen hours before the injection of the opaque media in order to insure partial dehydration and produce higher concentration of dye by the kidneys. A great contributing factor to

* Presented by Sister Viola, O.S.B., R.N., R.T., at the Annual Convention of the S.D.S.X.T. on May 7th at the Cataract Hotel, Sioux Falls.

Sister M. Viola, O.S.B., R.N., R.T., Article



Intravenous Pyelograms Weight 168 Pounds.

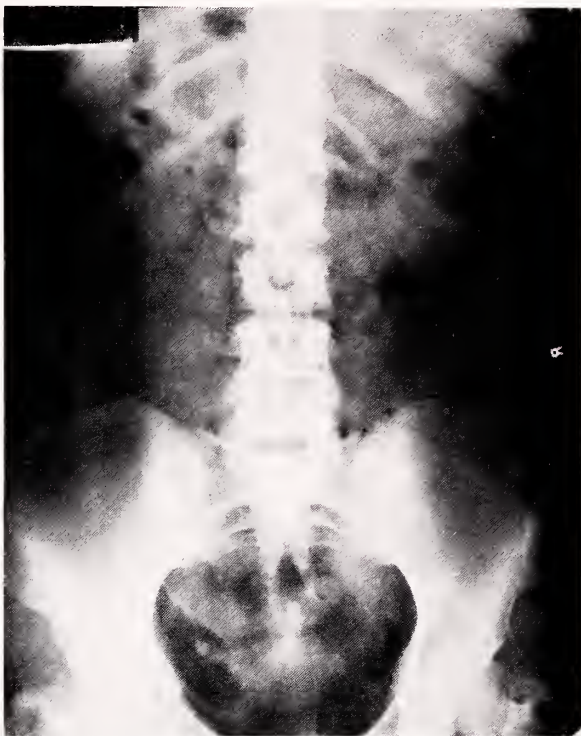


Fig. (a) Preliminary film before injection of dye.



Fig. (b) Film taken twelve minutes after injection of thirty cc. of diodrast.

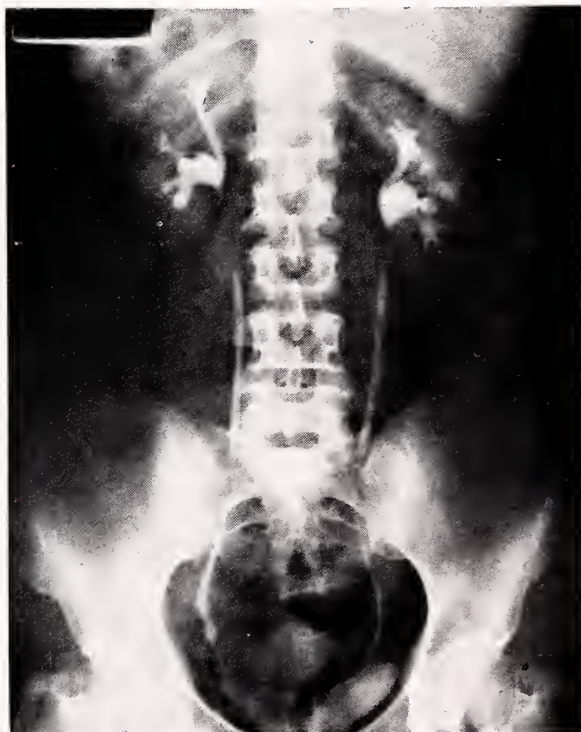
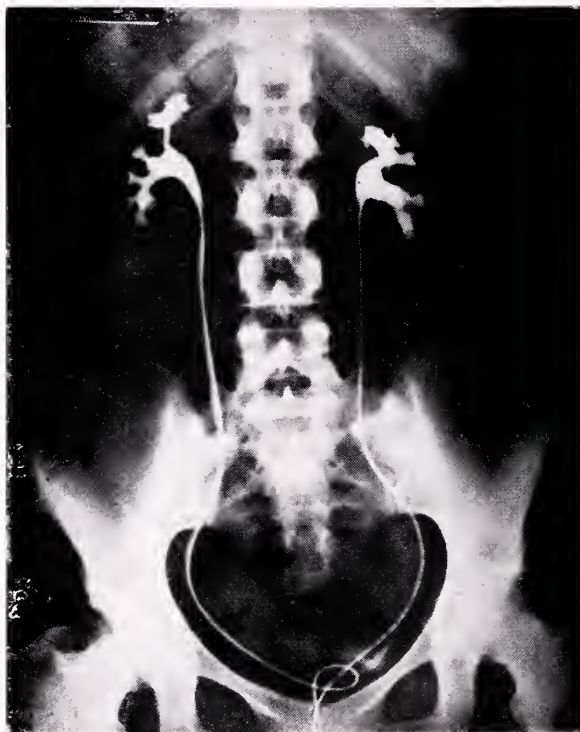


Fig. (c) Film taken immediately after releasing compression band.

Sister Viola (Continued)



Retrograde Pyelogram.



Retrograde Pyelogram.

poor technique is improper preparation of the patient prior to the examination.

Order sheets are prepared and kept in the x-ray department. The orders are sent to the floor by the x-ray department for each individual patient having intravenous pyelogram unless otherwise ordered by the attending physician. The form used for the order follows:

ORDERS FOR ROUTINE INTRAVENOUS PYELOGRAM

Name _____ Room _____

1. Cathartic: Magnesium sulfate, 3 tea-spoons, or Caster Oil, 2 ounces, stat.
2. No fluids after 4 P. M.
3. Dry Supper (no fluids)
4. No breakfast tomorrow.....
5. S.S. enema in P. M. and in A. M.

X-ray examination to begin at 8:00 A. M.
so as to have a high concentration of kidney excretion.

The most common substances used in today's urography are neo-iopax and diodrast. Every technician should be familiar with the constitutional reaction which may occur from these drugs because of their iodine content. For this reason it is necessary to test the patient for sensitivity. This may be done by three ways: (1) putting a drop of solution on the conjunctive and asking the patient to close the eye for 1½ minutes; (2) putting a few drops on the patient's tongue; (3) skin testing.

The advantages of the intravenous method are: (1) ease with which it is used by the laboratory, (2) visualization of the entire urinary tract at one setting, (3) opportunity to study the functional capacity as well as the anatomy of the excretory system.

This method is contra-indicated in patients who have severe renal functional damage as advanced nephritis, uremia, and severe liver damage.

When the patient is ready for the intravenous pyelogram he is placed on the table in a supine position with the knees slightly flexed so that the kidney will be as close as possible to the surface of the table. This will result in clear kidney definition.

The preliminary film is made to determine whether the gastrointestinal tract is free from air and fecal material. This will, in turn, determine whether or not the examination can be satisfactorily performed. After the in-

jection of opaque media the x-ray table is tilted with the patient being placed in the Trendelburg position. The kidney pelvis will then completely fill and the pelvic contents will remain filled a longer period by simple gravity.

The injection is carried out slowly, taking approximately five minutes to administer 30 cc. of diodrast. The amount of dye varies from 20 to 30 cc. An emergency tray with a sterile syringe and adrenalin should always be available for immediate use.

Following the administration of the dye, radiographs may be taken at intervals as desired by the urologist or radiologist. This will depend upon the preparation and the age of the patient.

Moderate compression is applied over the ureters during the examination to insure keeping as much dye as possible out of the bladder until sufficient dye has appeared in the renal pelvis and ureters. Gauze is folded to 2-inch thickness to apply under the compression band over the ureters just above the crest of ilium. Twelve minutes after the injection of dye the second radiograph is taken. The pressure is usually released after the second radiograph. The third radiograph is taken immediately after releasing compression, approximately twenty-five minutes after the injection of the dye, usually with the patient in supine-horizontal position. This will result in entire visualization of the ureters. Occasionally vertical film is taken to determine whether or not any residual urine is present and to clear the terminal ends of the ureters. In cases of impaired renal function because of delayed excretion, the best shadows may not be obtained from thirty minutes to three hours after the injection of dye.

Particular attention and stress should be given to absence of motion and absolute suspension of respiration in order to clarify kidney definition.

The retrograde pyelography gives the best differentiation of tissue. Its use is generally recognized to yield information which is anatomical rather than physiological. The two dangers which must be guarded against when using the retrograde method is over-injection and traumatization by cystoscopic or urethral catheters. The retrograde method is never used in bladder infection because of

the danger of infecting the kidneys.

After the insertion of the radiopaque catheters their positions are recorded on a survey film similar to the K.U.B. The renal pelvices and calyces are then filled with opaque medium injected through the catheters, the patient preferably being put in the Trendelburg position and injection made by gravity method to prevent over-distention of pelvices and calyces and obscure pathology and also to prevent injection of the contrast media into the kidney parenchyma. The second exposure is then made. During the withdrawal of the catheters additional opaque material is injected to fill the ureters. With the least possible delay, the third film is exposed, in which the ureters and a partially filled bladder can be seen. After the third film is made, an upright film is made in order to determine renal mobility.

The aim of the technician should be to obtain the maximum tissue differentiation. The technician should keep in mind the two prime essentials for which to strive in a radiograph, namely, maximum detail and sufficient density. The two important factors that control detail visibility are contrast and density. The proper balance between the two will give us maximum visibility of detail or maximum tissue differentiation. This can be accomplished by using a higher range of voltage and less milliamperere seconds. The radiograph will result in a more uniform density without, however, losing proper contrast.

Factors used for the average patient approximately 20 cm. thick are 40-inch distance, 100 Mas., 20 Ma Sec. and 76 Kilovolts.

Of course, these rules regarding time kilovoltage, etc., should be changed from time to time to suit the distinctive needs in each patient. These changes become more accurate as the technician gains experience.

It is evident that urography is an important and expensive field and that the part of the technician under the direction of the radiologist is of ever increasing responsibility.

CONSTITUTION AND BY-LAWS FOR SOCIETIES AFFILIATED WITH THE AMERICAN SOCIETY OF X-RAY TECHNICIANS

Following are four articles from the Constitution and By-Laws for the South Dakota Society of X-Ray Technicians so there may be a clearer understanding of the Society. Article II — Governing Body; The American Society of X-Ray Technicians shall be the governing body. Societies needing the council of an Advisory Committee, will submit their problems to the Executive Committee of The American Society of X-Ray Technicians. Those problems which the Executive Committee can not dispose of will be referred, bl them, to the Council on Education and Registration.

Article III — Object; Section 1. The object for which this Society is established is to promote the Science and Art of Radiography. Section 2. To assist in establishing approved standards of training, and recognized qualifications for those engaged in technical work in X-Ray departments. Section 3. To provide meetings for the reading of papers and discussions of problems pertaining to the work of the X-Ray technicians. Section 4. To cause to be printed and published such proceedings and reports of the Society as are deemed advisable by the Executive Committee and to submit for publication all material pertaining to radiography and allied subjects as posses sufficient merit.

Article IV — Membership; Section 1. The membership of this Society shall consist of Active Members, Members-elect, Associate Members, Honorary Members and Life Members. Section 2. Active Members, hereinafter designated as Members, shall be restricted to those who are members in good standing with The American Society of X-Ray Technicians. Section 3. Members-elect shall be registered technicians in good standing with The American Registry of X-Ray Technicians. They shall have all the privileges of active members except the right to vote and hold office. Section 4. Associate Members: Those interested in X-Ray but not qualified to become members-elect. Associate members actively engaged in x-ray work who can qualify to become members-elect shall be limited to a four year tenure of membership. Associate members may not vote or hold office. Section 5.

*Remember to
Patronize
Your Advertisers*

Honorary Members: Those who have distinguished themselves in the field of X-Ray, and who shall have been voted honorary members by the Society. Section 6. Life Members: Those who have rendered unusual service to the Society.

Article V — Membership Fees; Section 1. The Initiation Fee for Active Members, Members-elect and Associate Members shall be uniform and of such amount as is required by the Society. The initiation fee shall in no case exceed \$5.00. Section 2. The Annual Dues for Active Members, Members-elect and Associate Members shall be \$5.00 (or less if a sound financial status of the society can thus be maintained), payable each year in advance before May 1, the beginning of the Fiscal Year and shall include a subscription to THE X-RAY TECHNICIAN. Section 3. Subscribers to THE X-RAY TECHNICIAN, upon becoming members shall receive an adjustment in fees as provided for in their subscription agreement. Honorary Members shall receive the official journal without charge. Section 4. Any state or district society member in good standing transferring from one affiliated jurisdiction to another, will on application to the Treasurer of the first affected affiliated society or district be transferred by reciprocity and said members' dues be prorated by the Treasurer between the two societies. Change of address for subscription to THE X-RAY TECHNICIAN or other mail remains the responsibility of the transferring members.

WINNER HOSPITAL

(Continued from Page 19)

committee of the Cooperative Health Federation of America:

1. Summary of current operating statement.
2. Transcript of disease index if available.
3. Summary of all services rendered."

Rosebud Community Hospital will very likely be completed and in operation by the time that this article goes to print. We have been told that while it is not the largest hospital-clinic in the world, it will at the same time be as new, modern and up to date as possible.



From where I sit by Joe Marsh

A Tonic For The Missus

The missus came marching in with a new hat yesterday. She was as happy as a circus poster.

I've learned one thing about the hats she buys. A hat is a tonic to her. If she's feeling blue, nothing gives her a lift like a new hat. Now, I could trade in my old grey fedora without raising my blood pressure a notch. But I'll admit that more than once I've bought a new briar pipe I didn't need—just because life was getting a little bit monotonous.

With Buck Howell it's something else again. When Buck is feeling low, he gets over it by blowing on a broken-down clarinet he hasn't mastered in twenty years.

From where I sit, different people are *always* going to respond to different things in different ways. So let's keep a friendly understanding of what other folks get out of a new hat, an old clarinet, a chocolate soda or a temperate glass of sparkling beer or ale now and then.

Joe Marsh

EDITORIAL PAGE

ASSISTANCE REQUESTED FOR S. D. MEDICAL HISTORY

We were asked on short notice to prepare a "History of medicine in South Dakota" for the 80th anniversary issue of the Journal Lancet. To our surprise no such history has ever been compiled, and the several physicians to whom I wrote — as well as the State Historian — expressed the thought that such a history should be gathered. For the Journal Lancet number I just "reached into the blue," and in doing this, have become interested enough to try and get together a more factual record.

From the letters and discussions we feel that we shall be able to obtain much information and encouragement. We are a young State, and so many of our communities still have early day physicians and settlers, whom we are most anxious to hear from. An appeal shall be made regularly through the issues of our State Medical Journal.

Our idea is that such a record should have to do with the medical care received by the people of our State, and not just a review of the Medical Association. All groups shall be contacted during the coming months so as to include:

- S. D. Public Health Association
- The Indians
- The Indian Agencies
- The early settlers
- The War Department, i.e. troops in the State in the early days
- Pioneer Mothers and home care
- Pioneer Physicians
- Hospitals
- Nurses
- Physicians and others groups
- State Board of Health — Medical practice acts, etc.

This attempt is made in the hope of getting sufficient material and data that might be correlated and put into good form for future reference. We shall greatly appreciate any encouragement in this endeavor, and the more of the Physicians of the State who will send in some information the more complete will be our record. Please send some to me direct or in care of our Journal.

Fraternally and sincerely
Will E. Donahoe, M.D.

GULLIBLE'S TRAVELS

The nurses in the State called a meeting of various interested agencies to discuss a survey of nursing needs. **President Saxton** and I represented the Association at the day long meeting in Pierre.

Next morning I left Sioux Falls on the Hiawatha — destination Washington, D. C. and the Interim Session. **Dr. H. Russell Brown** made the trip as delegate giving us able representation.

Tuesday, December 6, was an important day because of the election of **Dr. Lyle Hare** to third place nationally as General Practitioner of the year. **Dr. Andy Hall** of Illinois was the winner.

Attended the various sessions of the House of Delegates in the next few days and attended the **Ralph Edwards**, "This is Your Life" show. Spent half a day at the Veterans' Administration headquarters and was greatly impressed by a piece of correspondence that took thirty days to travel from the fifth to the ninth floor. Did get some useful information on our V. A. Home Town Care Plan. Made this visit with **R. R. Rosell** of Minnesota Medical Association, and **Tom Doran** from Wisconsin.

Toured the city of Washington one afternoon when the House of Delegate didn't meet in the company of four other executive-secretaries, including **M. C. Smith** of Nebraska and **Ralph Neill** of Washington (not D. C.).

Returned home early Saturday morning December 10th to catch up on the office work.

Drove to Yankton on the 14th to attend the district meeting at Sacred Heart Hospital. Made the acquaintance of **Drs. Flynn & Scales** from Pickstown whom I hadn't met before.

The next day I appeared with **Irv Merrill** of KUSD, Vermillion on that station discussing the evils of self-medication.

Seven days later broadcast again, this time with **Dr. Hugo Andre** of Vermillion.

The next week was taken up with holidays, office work, etc. until Jan. 31st when I discussed the activities of the Medical Association with the internes at Sioux Valley Hospital in Sioux Falls.

This is



JANUARY
1950
Vol. 4 No. 1

YOUR MEDICAL ASSOCIATION

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

DR. LYLE HARE THIRD IN G. P. COMPETITION

Dr. Lyle Hare of Spearfish placed third in the nation's "General Practitioner of the Year" contest held at the opening session of the American Medical Association in Washington, D. C., Tuesday, December 6th.

Dr. Andy Hall of Mt. Vernon, Ill., placed first in the balloting and Dr. Thomas Rhine of Thornton, Ark., second. Dr. Hare ranked second nationally in the contest held a year ago.

A graduate of the University of South Dakota and the University of Illinois college of medicine, Dr. Hare has practiced 38 years in an area extending into three states. He has delivered 3,000 babies in Spearfish and surrounding territory.

Dr. Hare is a former mayor of Spearfish, once commander of the Spearfish American Legion and active in Boy Scout work, Red Cross and the affairs of Black Hills Teachers college where he once coached the athletic team.

Harry Farrell, M.D. will now be associated with E. E. Greenough, M.D., Sioux Falls, and will specialize in Pediatrics.

BLACK HILLS DISTRICT SOCIETY OFFICERS FOR 1950

Officers of the Black Hills District Society, were elected as follows: **G. Heidepreim, M.D.**, Deadwood, South Dakota, president; **A. A. Lampert, M. D.**, Rapid City, South Dakota, vice-president and **Harold J. Grau, M.D.**, Rapid City, South Dakota, as secretary treasurer.

THIRD DISTRICT MEDICAL SOCIETY MEETS

Officers of the Third District Medical society were selected at a meeting held in Volga, as follows: **Dr. Dean Austin**, Brookings, president; **Dr. Donald Scheller**, Arlington, vice president; **Dr. C. M. Kerschner**, Brookings, secretary; **Dr. F. E. Boyd**, Flandreau, and **Dr. E. A. Hofer** of Canova, delegates; **Dr. Magni Davidson**, Brookings, and **Dr. Clarence Sherwood**, Madison, alternates. **Dr. M. Dobrinsky**, Estelline; **Dr. J. A. Muggley**, Madison, and **Dr. M. C. Tank**, Brookings, were chosen censors. Following a dinner at the Martinson Tea room for the doctors and wives, the doctors adjourned for a meeting at which **Dr. Hans Jacoby** of Huron spoke. Members of the auxiliary were entertained at the home of **Dr. and Mrs. A. P. Peeke**.

YANKTON DISTRICT ELECTS M. A. AULD

Dr. M. A. Auld, Yankton, was elected president of the Yankton District Medical Society at its regular meeting at Sacred Heart Hospital, December 14th. Dr. Robert Schwartz, Wakonda, was named vice-president and secretary-treasurer, F. J. Abts was reelected to that position.

Drs. Auld and Schwartz were also named delegates with their alternates to be elected in April. A recommendation for councillor from the district was also held over to the April meeting.

Censors elected were A. P. Reding, three years; V. I. Lacey, two years; and C. F. Johnson, one year.

John C. Foster, Executive secretary of the State Association was introduced and spoke briefly on the Interim Session in Washington.

The scientific program under the direction of Dr. R. L. Ferguson of the University staff consisted of a presentation on statistics in the disease field made by sophomore students Morris and Alway.

E. T. Edwards, M.D., formerly with **E. E. Greenough, M.D.** of Sioux Falls, has left to practice in Kansas City.

PHARMACEUTICAL DIVISION

BLISS C. WILSON, Editor

MODERN THERAPEUTIC AGENTS

by Edgar Parry, Instructor in Pharmacy
South Dakota State College

CORTISONE AND ARTHRITIS

In the early 1920's attention of the medical profession at large was directed to the fact that pregnancy and jaundice produced beneficial effects in patients afflicted with rheumatoid arthritis. These patients experienced a reversal of the physiological condition and symptoms disappeared. On this basis, the theory was epostulated that there are corrective forces within the body at all times which under proper stimulation would reverse the course of rheumatoid arthritis. Evidently some basic biochemical disturbance resulted in an overgrowth of articular cartilages and synovial membranes which could be corrected by a biological change in the body.

Various methods were used to bring about the proper stimulation of these forces. Mass blood transfusions were made from jaundiced and pregnant donors. Jaundice was produced in some patients. Various female hormones and biliary products were used. Of all methods, time showed the hormone therapy to be most plausible. When general anesthesia and surgical operations were shown to stimulate the adrenal cortex, it gave evidence that some hormone was the key since these same procedures also brought about a temporary remission of symptoms of rheumatoid arthritis.¹ This afforded the clue that the force or hormone must lie in the adrenal cortex, rather than in the liver. Also, since the joint, muscle, and neural symptoms of rheumatoid arthritis are closely akin to those of Addison's Disease, and since hypoadrenalism always results in the syndrome known as Addison's Disease, it seemed likely that the corrective force for arthritis must lie in the adrenal cortex.

Previous to 1941, Dr. Edward C. Kendall of the Mayo Foundation had announced the isolation of a substance from the adrenal cortex which he called Compound E, and in 1941

he announced that cortical fractions generally, and the unknown Compound E, showed some possible effect in arthritis.² All information was then pooled with government cooperation, and Dr. L. H. Sarett, head chemist at Merck Laboratories, was given the job of synthesizing Compound E. He completed the synthesis in 1946 in what other chemists have termed the most difficult synthesis they have seen. Dr. Sarett had started with desoxycholic acid obtained from ox bile, and after thirty-seven time-consuming steps had synthesized Compound E (17-hydroxy-11-dehydrocorticosterone) which was then named Cortisone. It was not until 1948 that a sufficient amount had accumulated to allow preliminary clinical trials to begin.

The first patient to receive Cortisone was a young woman with a severe case of rheumatoid arthritis of four and one half years duration, during which time all other therapy had failed to bring relief.¹ She was barely able to get out of bed. The first eight days she was given one — 100 mg intergluteal injection daily. After three days she was able to roll about in bed easily and had much less muscle soreness. On the fourth day she was able to walk with a slight limp and her appetite had improved markedly. After seven days, all symptoms had disappeared and a three hour shopping tour brought no ill effects. Menstruation occurred on the eleventh day and it was not accompanied by the usual flareup in the joints. On the ninth day, dosage was reduced to 50 mg. and on the thirteenth day further reduced to 25 mg. This brought about recurrences of symptoms.

Fourteen patients in another report experienced a remission of symptoms in the first few days, followed by diminished pain and tenderness in joints due to motion. All had increased appetite and gained weight. All experienced a greater sense of well being, due not only to relief from pain but to an actual increase in mental capacity. After from eight to sixty-one days, nine were given Cholesterol instead of Cortisone and sym-

ptoms recurred in two to four days and sedimentation rates increased. Cortisone brought prompt relief of symptoms again. Cortisone did not completely relieve in this report however, as minor flareups occurred rather often.

Another case history is based on five patients ranging from forty-nine to seventy-one years of age who had had arthritis for from four to fifteen years.³ They were given daily injections of 300 mg. of Cortisone for six to seven days. Three patients showed marked improvement in six to twenty-four hours. The pain subsided and joint swellings began to reduce. All five showed improvement within seventy-two hours. Rest pain disappeared but joint muscle stiffness persisted. When Cortisone therapy was discontinued four of the five regressed within thirty-six to ninety-six hours. The fifth suffered a relapse in forty-eight hours, then unaccountably regained seventy-five percent of her maximum improvement in the next two months. One of the patients was diabetic and the insulin requirement increased during therapy but dropped to normal when Cortisone was stopped.

From the various reports read, the toxicity of Cortisone appears to be less than that of ACTH. Doses of over 100 mg. can cause endocrine disturbances that result in acne, mild hirsutism, rounding of facial contour, cessation of menses, and fluid retention which results in a transient edema usually at the joints. Since it appears to change the brain wave pattern there is danger in this aspect in excessive dosage, but by the same token there are possibilities it may prove useful in such mental states as melancholia, mental depression and schizophrenia.

From the general facts known about Cortisone, some conclusions may be drawn. It will probably not cure arthritis, but will attenuate the disease and relieve the symptoms. It will probably have to be taken continuously as insulin is. One hundred mg. appears to be a safe maintenance dose, however, until more is known about the effect of prolonged therapy, this conclusion is not a safe one. It acts to speed up carbohydrate metabolism since blood sugar levels remain high even on prolonged fasting, and insulin requirements are greater during Cortisone therapy in diabetics.

We cannot be sure how much the future

holds for this drug. Isolated reports show it to be beneficial to such conditions as lupus erythematosus, psoriasis, chronic ulcerative colitis, gout, and rheumatic fever. It brings relief in Myasthenia gravis and shows possibilities in Addison's Disease.

Research is tremendously handicapped by the scarcity of the drug and difficulty of synthesis. Recently it was announced that the drug could be synthesized from a chemical extracted from *Strophanthus sarmenosus*, a plant found in Africa.⁴ Synthesis from this chemical requires only twenty steps instead of the present thirty-seven. The S. B. Penick Company and other crude drug companies, with the help of the United States government, are experimenting with production of this plant in the United States. It is also reported that *Dioscorea* or Mexican Yam contains the same chemical.

The need for a new synthesis is great. It requires sixty-five of ox bile to produce one half pound of desoxycholic acid, the starting chemical in the present synthesis. Merck and Company can produce Cortisone at the rate of only 200 grams per month. The cost is approximately \$18,000.00 for a quantity sufficient to treat a patient for three weeks. The need is tremendous. An estimated eight million rheumatoid arthritis suffers in the United States requiring 100 mg. daily each, means a total of 800,000 grams daily or 642,400 pounds annually. This amount will have to be doubled or tripled to provide for other diseases and for further extensive research.

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THE PUBLIC HEALTH — YOUR FIRST CONCERN HYPERTENSION

Hypertension, or high blood pressure, is today one of the most important and most common conditions affecting the heart. For people in middle age it has become the principal cause of heart trouble. While the underlying basis for the majority of cases of hyper-

tension is still obscure, there is much that can be done by medical science to alleviate the symptoms and to eliminate the unnecessary strain and wear on an already over-taxed heart.

What is and what is not abnormal blood pressure depends upon the individual. What is high for some may be normal for others. Contrary to popular belief, there is little truth to the adage that an individual's pressure reading should be 100 plus his age.

Blood pressure in any individual can and does vary as much as 15 to 50 points daily, depending upon his emotional state and level of activity. For practical purposes, medical authorities agree that any pressure persistently above 150 millimeters in the systolic phase or 90 millimeters in the diastolic phase is excessive. Of the two, the more significant is the diastolic reading, for it indicates the resistance met by the heart during its resting phase.

The elevation in pressure is brought about by a narrowing of the passageway for the blood in the arterioles, resulting in the rise of resistance to the flow of blood. In some instances, such as certain diseases of the kidneys or a tumor of the adrenal gland, the pressure is a clearly demonstrated secondary factor, stemming from the diseased condition. In the vast majority of cases, however, there is no discoverable cause to explain the increased pressure. Doctors call this condition **primary** or **essential** hypertension.

In order to keep the blood flowing at a normal rate against increased resistance, the heart must perform extra work, as a result of which — like any muscle — it enlarges. This increased resistance, if not overcome or controlled, causes the heart and arteries to wear out prematurely. Cerebral thrombosis or hemorrhage, congestive heart failure or coronary thrombosis are frequently the end results of long, unabated pressure.

This long elevated pressure that denotes hypertension is merely a smpton — a physical finding — of the baffling underlying condition. Often, in the early stages, it is the only indication. There are many who go through life either unaware or untroubled by it. In other cases, however, as hypertension progresses there is an increase in symptoms. These later symptoms are the warning signals that hypertension has begun to affect

important organs such as the heart, kidneys and blood vessels.

Middle-aged patrons may come to the pharmacist with chronic complaints of **early morning headaches, dizziness and weakness, shortness of breath**, as well as **increased frequency of urination**. While these symptoms may be due to other factors — or may even prove of no significance — they may also be indicative of destructive changes occurring as a result of hypertension. It is important therefore that the pharmacist, as a source of reliable health information in the community, should unhesitatingly recommend that such persons obtain thorough medical examination by a competent physician.

While one should beware of those who promise cure, early treatment and medical care by a competent physician will not only help relieve distressing symptoms but will give the heart a better chance to adapt itself to its handicapped condition. A damaged heart that is not abused, that is sensibly restricted in its range of activity, and which is aided by medical care and supervision, will hold up longer.

A Health Information Program Jointly Sponsored by:

American Pharmaceutical Association
American Heart Association
National Heart Institute of the U. S. Public Health Service.

COMMISSION ON PROFESSIONAL MAN POWER FOR PHARMACY ORGANIZED

A concerted effort to estimate pharmacy's professional man power, and to make available for the use of the National Security Resources Board and other government agencies an accurate roster of the pharmacists in the United States, was launched on December 1 in Washington, D. C., when the Commission on Professional Man Power for Pharmacy was formally organized. Participating in the organization of the Commission were representatives of each of the ten organizations comprising the National Drug Trade Conference, and acting in an advisory capacity were representatives of a number of government agencies.

The Commission on Professional Man Power for Pharmacy was created in compliance with one of the principal recommendations of the Pharmaceutical Survey which

directed the American Pharmaceutical Association to call a meeting of representatives of the organizations holding membership in the National Drug Trade Conference and form an organization to survey and make permanent arrangements for estimating the man power resources of the profession.

In line with the recommendations of the Survey, the Secretary of the American Pharmaceutical Association acted as chairman of the meeting and the Secretary of the National Association of Boards of Pharmacy, as secretary.

Following the reading of the recommendation of the Survey and statements from the organizations represented in the National Drug Trade Conference, there also were comments from the representatives of the armed services, the Veterans Administration, the U. S. Public Health Service, and the National Security Resources Board.

The consensus of the meeting was summed up, as far as the importance of pharmacy man power to the government is concerned, by Admiral Thomas C. Anderson of the National Security Resources Board, who stated that of the twenty categories of professional and technical personnel who are engaged in the health professions being studied for mobilization in the event of war, pharmacy is considered among the top six in importance. He listed these six groups as physicians, pharmacists, dentists, nurses, sanitary engineers, and veterinarians.

Admiral Anderson said: "To draw up a sound plan for the effective utilization of these professional groups in time of war, statistical data must be assembled which will indicate the man power supply in each profession. We need to know how many there are, their geographic and age distribution, their professional preparation and experience and other basic facts about their qualifications for active service in their home communities or elsewhere in the civilian or military practice of their professions."

Stressing the need for the establishment of a roster of pharmacists, Admiral Anderson pointed out that, "current inventories of physicians, dentists, nurses and veterinarians have been established and are being maintained by the respective national associations. A similar project for sanitary engineers is in progress by the American Public Health As-

sociation. There also is being developed a roster of scientific and professional personnel of other than the health professions.

"We believe that a man record of pharmacists should be established as a preparedness measure. Such a record would be invaluable should mobilization of our health resources become necessary," the N.S.R.B. official emphasized.

The present situation with respect to man power statistics was admirably reviewed by Dr. Edward C. Elliott, director of the Pharmaceutical Survey, who pointed to the absence of accurate records. While complimenting the National Association of Boards of Pharmacy for the start that had been made in accumulating information on an annual basis, he pointed out that there were great gaps in the completeness and continuity of the information desired.

Director Elliott called attention to the fact that more than 20,000 students are now enrolled in colleges of pharmacy and that this will constitute a great influx of man power for the absorption of which proper preparation will have to be made. He also called attention to the necessity for State-by-State estimates of supply and demand for professional man power in pharmacy as a basis for the development of the programs of our pharmacy schools. He expressed keen appreciation of the interest of the profession and the drug industry in launching the Commission which had been recommended in the Survey.

P. H. Costello, Secretary of the National Association of Boards of Pharmacy, brought to the meeting the latest statistics collected by that organization, which included licensure and census data showing among other things the number of pharmacists licensed by examination and by reciprocity, total number of licenses issued, number of licenses reinstated, number of licenses cancelled by death, number of licenses suspended or revoked, number of pharmacists in good standing on January 1, 1949, a breakdown by sex and education, a breakdown of type of practice, such as hospital pharmacy, retail pharmacy, etc., a breakdown by ages and other data of statistical nature.

Patronize Journal Advertisers

Mills Drug — A National Model for Successful Employer-Employee Relations

by Louise Garnier

Your secretary was pleased to read in the December issue of The Pennsylvania Pharmacist a re-print of an article by Louise Garnier entitled "The Key to Successful Employer-Employee Relations" which originally appeared in The Apothecary, and which outlined in detail the employer-employee policy of Harold W. Mills of Rapid City, South Dakota.

Because many of the suggestions in this article are adoptable to all pharmacies of one or more employees and even to one-man stores, we recommend that you read the re-print which appears in this issue.

Harold Mills is to be congratulated that the policies adopted in his store in a western South Dakota city are being called to the attention of drug store owners and managers in the eastern states. Not all of the "good ideas" come out of the metropolitan areas.

This is the employer-employee policy of Harold W. Mills of Rapid City, South Dakota

Identification Badges

We ask that each employee on the floor wear his or her identification badge. These badges are attractive and it tends to build a closer association with the customer. The office will issue each new employee a badge, and whenever this badge is lost a new badge will be issued at a charge of 50c to the employee.

Layaway Merchandise

Unless we have a set routine to follow in handling layaway or hold merchandise, considerable amount of confusion is usually experienced. When an item is to be held, we ask that you get at least 50% down payment, and at the time make a charge ticket out in duplicate showing the customer's name, either the address or phone number if possible, also the approximate time it will be picked up. Put the original ticket with the merchandise and leave this merchandise in the steel cabinet back of the prescription department. Give the duplicate to the customer, then if the customer at a later date comes in to make a payment on this, and still does not wish to

pick up the merchandise, again make out a charge ticket showing the amount of money paid, give the customer a receipt, and BE SURE to place the original credit with the package. Under no consideration do we want any of these items held in the departments from which they are sold; do this on all items even if, as the customer often says, they will "pick them up in a day or so." Make no exceptions to this rule and then your fellow employees can finish the sale without difficulty. Many of our customers have a habit of leaving items such as money, letters and merchandise to be picked up by some other party. As a general rule they have usually just been kept in the department the customer goes into when they enter the store, and then when the party comes to call for this merchandise we need a detective to find it. All items of this type should be taken to the prescription department and any person entering any of the other departments and asking for this merchandise should be directed to it. Again we ask that you see that this is done. We have a drawer in the prescription department where items such as clothing, billfolds or merchandise left by any customer and found in any department should be placed immediately. In this manner we not only show the customers we are careful about these things, but we build up confidence by doing so. Whenever anything is found take it immediately to the prescription department; don't wait until you go off shift.

Layaway Magazines and Newspapers

To many of us the layaway of a 5c newspaper seems to be a very insignificant thing; but actually a customer can be lost more quickly over the failure of our proper attention to this than for any other reason, in any other department in the store.

Most of the newspapers which we carry have route boys who will deliver through the residential districts. Consequently, we do not encourage the enlarging of our list of layaways. At any time that a request is made for a customer's name to be added to the list

an OK should be obtained from one of the three of us.

During the summer season, especially, we have more requests for new layaways, and during this time we should all be more careful in our handling of this service. These rules apply both to newspapers and magazines.

Uniforms

Smocks for all floor girls are obtained in the office, at which time a charge ticket should be made out to the employee. Our uniform service is handled by the Servall Laundry Company, and half of the charges of laundry are passed on to each employee. We find that in doing so more care is taken of the uniforms. This same procedure holds true for the male employees as well as the fountain. In the past very little has been said about the wearing apparel of any of the floor girls, and because of the hosiery shortage we gave the employees the privilege of wearing slacks if they so desired. Our trouble with this rule is the fact that some girls on the shift are wearing slacks and some dresses. We realize that during the colder months there are drafts coming from the two entrances and that the slacks are no doubt considerably warmer. However, we feel that dresses should be worn during the months of May through September.

Coffee Situation

In the past we have let ourselves form a very careless habit of letting the coffee drinking become a serious detriment to our service. We realize that time out during a shift is probably reasonable, but we have experienced so many complaints from customers that we feel that the manner in which we are doing it should be corrected. On the morning shift never more than two employees should take time out for coffee at one time. And furthermore, there should always be an employee in both the east and west end of the store. After the morning shift have had their coffee, then we feel that at no time when one employee is alone in a department should they leave that department. However, if they feel that a cup of coffee is necessary, then they may take their coffee to their own department, where as they drink it they can still give service to the customers. That rule should hold true until the store is closed. Let's see that this rule is strictly observed.

Want Books and Merchandise Pricing

During the course of a month's time our records show that anywhere from 500 to 1,000 cases of merchandise come into our receiving department. This is a real responsibility in seeing that this merchandise is checked, marked and distributed to the proper departments in the store. We are doing our utmost to have every item priced correctly, thereby eliminating errors and making it much easier for a new employee to carry on the service of their department. However, we are all apt to make mistakes and occasionally merchandise will be marked wrong or be put on the shelves with no mark whatsoever. We ask each and every one of you to serve as a double-checker on this, and any time such an article is found please take the responsibility to see it is marked properly, and if it does not belong to the department where it is found, then see that it gets to its right department. New merchandise is arriving daily, and because of the fact that our employees work on split shifts it is absolutely impossible for us to notify everyone. Therefore, never give a negative answer to a customer's inquiry for merchandise new to you, but make sure by asking either the other employee or someone in the back room who will know about this merchandise. Each afternoon a short list shall be turned in to our stock man, and he in turn reports all merchandise shortages from you drug girls, as far as want books are concerned. This holds true not only in the drug department, but prescriptions, cosmetics, and cigar departments as well.

Phone Numbers and Addresses

It is very important that the office has your phone number and address, as there may be many occasions when we wish to get in touch with you when you are off duty. If no phones are listed, please give up the closest possible one where you may be reached. When any change in address occurs, notify the office immediately.

Self-Service Arrangement

A few years ago we changed the floor arrangement, putting in five center counters with the idea of making the store as much self-service as possible. We have lacked, mostly through our own fault, the complete selling of this idea to our customers. We want to stay away from the gate and fence idea

that the chain grocery stores are using, because we like our customers to feel we can still give them personal attention when they so desire. Every day we have many new customers who enter our store for the first time, and we cannot expect them, without some coaching on our part, to follow through with our plan. At no time is it necessary for more than one girl to be at the cashier booth. The other girls should act as roving clerks, endeavoring to help the customers for all of these counters. Point out the merchandise to the customer, and then, with tact, ask them to take it to the cashier counter for wrapping and payment. Our main difficulty seems to be now that when three of the girls in the drug department, for instance, gang up at the cashier counter and in passing the time of day between themselves, completely ignore the customers. Our set-up is right, because it has been proven so by lot bigger stores than ours, but it is up to the individual employee to make it a success. Right here we should state that the customers should be courteously shown where we locate the type of merchandise they want . . . not by pointing and saying, "It's up that way," but personally, and with a few kind words, showing the customer. When this is done that customer will understand the set-up the next time he comes into our store. This can apply to all of the store, as all departments seem to hesitate about taking care of the customers around counters 4 and 5, and also the school section. Please get this idea now, that no one is hired for any particular department to the extent that they can stand by and let a customer walk out of the store rather than step out of their department to see that the customer is waited on.

Merchandise Shorts

Because of our extensive type of departmentalized operation, all departments will receive numerous calls each day for merchandise outside their departments. Whenever a call of this kind occurs, a special effort should be taken to try to locate this merchandise. Try to obtain information from an older employee, and if the request happens to be by telephone, please ask if you may call the party back, giving them the information they desire.

At no time should you jump to the negative answer, because in doing so many val-

uable sales are lost on merchandise located in another department. Very tactfully, you can inquire as to the nature of the item called for, and in most cases decide at which department it should be located.

However, when you are sure that you are unable to fill the call, then fill out one of our Check Sheets, which you will find by the cash register at each department. In this manner, the information will go to the buyer, who will determine by the number of calls whether or not the item should be carried. This is very important, as it is the only means of our knowing the number of calls we are having for merchandise which we should carry.

Liquor Department

Under this department, the store is licensed by the Federal Government, the state and city. Consequently, all of us must assume our share of the responsibility in operating this department. Rules and regulations are changing frequently on this type of merchandise. Therefore, please acquaint yourself with the regulations in force at the time you start your employ.

Advertising

Last year we spent approximately \$7,000 for advertising. This includes newspaper, radio and other forms. But this advertising is absolutely worthless if a customer is not treated properly when he enters the store. All the advertising we do is useless without the co-operation and understanding of the employees. Try to know the customer better, understand his wants, be sincere with him and when he leaves you will have done a favor that will mean much more than all the advertising that we personally could do. We have a daily program over our local broadcasting station, we run a weekly newspaper ad and a weekly prescription ad. Read these, know about them, so that you can, if asked, tell the customer about it instead of letting the customer tell you.

Store Rules

We realize there are some of you employees who feel that you know much more about store operation than we do, and we grant that you are probably right, but our job is to keep the entire store operating, and the only way this can be done is by having set rules, and asking for everyone to obey them. What we can't understand is how any one of you can

have the time to stand and stare into space when there is always so much work to be done in every department. We don't believe it is necessary in any instance that time should be taken while on duty for reading magazines, or writing personal letters, or polishing fingernails. It seems to us if any effort is made, there is always plenty of dusting, etc., to do. Another thing which is very unsightly to a customer is to have a girl attempt to make a sale while chewing gum or have a clerk munching on nuts or candy while in the department. These things are so small it should not even be necessary to mention them, but still they are rules that are broken too frequently. Business heads in the world today say that the successful store of tomorrow is the store that, even with all the shortages not only of merchandise but of employees as well, can, through courteous individual service, build a following of satisfied customers. Let's see that our store is one of the successful ones.

Telephone

New employees will please refrain from answering the phone for at least two weeks after they have started working. In this way you will be better acquainted with your merchandise in the store, and save a lot of embarrassment for yourself as well as the customer calling. Another thing, remember that regardless of how busy you are, please be courteous when answering the phone because the customer at the other end of the line does not know what it going on. We have numerous calls for information, time, temperature, etc., and these should not be laughed about but instead should be considered a proof that the customers think enough of our store to call for this information. When answering the phone please say, "Good morning," "Good afternoon," or "Good evening, Mills Drug." If it is necessary to call another employee, check back and see that the calls are completed.

Time Clock

During your first few days with us, it will probably be difficult for you to form the habit of punching the time clock at the time of coming on and going off duty. However, it is absolutely necessary that this be done, as the office has no other way of knowing the hours that you have been on duty. Care should be taken that your card is punched on

the correct day. This applies to all employees, regardless of what department they are in. All overtime should be punched on the red side of your card.

Grapevine

So many times in the past false rumors have been circulated throughout the store by means of the so-called "undercover" grapevine. In the first place none of you have any right or reason to run down or talk about your fellow employees, and if any of us did, we certainly should be man or lady enough to tell that particular party to his face. We believe that if every employee took care of his department as we want to have them do, then none of you would have time to listen to the so-called rumors. The people who start these rumors should remember the old saying that "those who live in glass houses shouldn't throw stones."

Hard-to-Please Customers

So many times when an employee happens to get an irritable customer the employee usually is in bad spirits for the rest of the day. We should put ourselves in the place of the customer and realize this is quite possible, and furthermore this is simply a happening that is part of the day's business. Personally, we think every hard-to-please customer should be accepted by the employee as a challenge for the employee to do his utmost in courteous service to please that particular customer. A smile will break down the toughest disposition of any customer. Let's see more smiles.

Returns and Refunds

When anyone wishes to return merchandise, if at all possible, ask them if we can replace this with some other item, but if this does not meet with approval, then make a paid-out receipt, asking the customer to sign it, and if possible, for them to take it to the prescription department for their cash refund. If they hesitate in doing this, then the employee should take them down and see that the refund is made. In most instances refunds are part of our everyday business, and people desirous of refunds should be treated with the same amount of courtesy as you would if the customer was making a purchase. As to the question of whether or not a refund should be made, that responsibility should be passed on to the prescription man or one of us. This applies to all

types of merchandise, so please follow this procedure.

Filling Shelves

One of the first things an employee should learn in keeping his (her) department stocked, is the rotation of merchandise. Regardless of what the item is, the older merchandise should always be brought to the front so that it will be moved first. In doing this, a little care in removing the dust from the older package will help considerably in making this merchandise more presentable. In stocking the self-service counters, remember that a considerable share of reserve stock is carried in the base of these counters, and this stocking should be done every morning the first thing, and then followed up with a general dusting of all merchandise, not only on the counters, but shelves and all other displays.

Sweeping

We have a schoolboy who works from two to four hours daily, and his duties are to handle the heavier work of each department such as emptying waste cans and carrying heavier merchandise from the back room to the various departments. We cannot keep these boys up too late school nights, and consequently they are not here when the store closes. Therefore it is up to each employee to see that his department is in top shape for the shift coming on the next morning. This means sweeping the floor and generally checking the whole department. The liquor department in particular should be watched by both the cigar and drug girls. There is no reason why this should not be swept as well as others, sacks straightened, etc. It is not fair to leave your department in any way so that it is necessary for the shift opening up in the morning to have to do any of this work.

Pms

At various times we will offer Pms or bonuses on particular items of merchandise or single items. When we do this, to a certain extent we leave it up to the honesty of the employee to keep his records accurate, and it is certainly not fair to the other employees to have one person showing discrepancies in his reports on these sales. These PMs are given with the idea of creating an atmosphere of competition, and at no time should they encourage any jealousy.

Older Employees

Older employees should at all times feel

free to give new employees suggestions, and new employees should co-operate with them rather than assume the attitude of resentment. Employees who have been in the store for at least a year certainly are better able to give advice as to the care of the merchandise, etc., than one who is not accustomed to the working of the store. Please accept these suggestions in the right spirit.

Merchandise Received for Mailing Direct to Manufacturer

At various times, we have requests from customers to send in items such as pipes, clocks, razors, pen and pencils, lighters, and so forth. This is all handled through the office, but when this merchandise is received from the customers, please write a ticket out on our regular charge pads with the customer's name, date, telephone number, if possible, description of the merchandise and what type of repair service is required. Please take the time to fill out this necessary information and do not forget to give the customer the copy and ask him to keep it as a receipt and present it when he calls for the merchandise. Under present conditions, do not promise any length of time for this service as different items require any time from one to three months.

Insurance

We carry group insurance at the store. Anyone may take it out; the cost is \$1.00 for one person (each month), and 50c for each dependent an employee wishes covered on that policy. The insurance covers part of the doctor bills, part of the hospital bills, part of the medicine needed. When the employee quits, the policy can be transferred to an individual policy if he so desires.

All employees are covered by the Hartford Accident and Indemnity Policy which we carry.

After an employee has been with us for a period of a year, they are presented with a \$2,000 life insurance policy, on which the premiums will be paid by the store, as long as the employee remains in our employ. When the employee leaves, a continuation of this policy can be made by arrangement with the company.

Vacation Plan

After a period of six months of continuous service by an employee, a paid vacation will

(Continued on Page 38)

NEWS ITEMS

The Edwards Rexall Drug at Lead, S. Dak. was re-registered as a pharmacy by the State Board of Pharmacy during the month of December. **Clifford L. Edwards** is the owner of two stores in Lead and he did not have a registered pharmacist to manage the second store when renewals were due in June. Pharmacist, **Ben F. Schwalm**, has been working for Mr. Edwards since early September and he is now listed as Pharmacist Manager of Edwards Rexall Drug.

Pharmacist **Charles H. Hess** took over the management of the Humphrey Drug Store in Huron after the death of **H. H. Humphrey**, Sr. and the Permit to Conduct a Pharmacy has been duly transferred to him. Mr. Hess has been employed in this store for ten years or more.

William W. Holliday resigned his position as pharmacist manager of the Walgreen Drug Store in Sioux Falls on December 14, 1949. **Milbert E. Mueller** who was also employed in this store as a pharmacist has been delegated full and complete authority by Walgreen officials to be in active management of the pharmacy department to replace Mr. Holliday.

Neal Chancellor returned to his home in Huron at Christmas time after several weeks employment with **R. H. Isaak** at Eureka. Neal tells me that he is interested in buying a drug store in a good location where business can be built up.

Pharmacist **Harry W. Lee** took a vacation from his work with the State Department of Agriculture in Pierre to visit his brother in Tacoma, Washington during the Christmas holidays.

H. E. Wagner, pharmacist-proprietor of the Wagner Drug Store in Parker suffered a heart attack early in December. He was taken to the McKennan Hospital in Sioux Falls where he is improving nicely according to late reports.

Swayne H. Lindsay who has accepted a position as pharmacist with the Sackett Drug and Jewelry Company, McLaughlin, called at the Secretary's office enroute from Denver to inquire about reciprocal registration to this state. Mr. Lindsay has practiced pharmacy in Hawaii for twenty years. Because of the strike situation in Hawaii, he returned to the States a year ago and located in Denver. His

original registration is in Ohio from which state he will reciprocate to South Dakota.

Pharmacist **George Isaac Tibbs**, 313 West 11th, Alliance, Nebraska is making application for reciprocal registration to South Dakota.

Inspector **Walter McCurdy** left Mitchell on December 19 for Yakima, Washington where he spent the Christmas holidays with Mr. and Mrs. **Lloyd Hove** and family. Mrs. Hove is Walter's only daughter and Walt must see those grandchildren at least once a year.

SAFE-GUARDING NARCOTIC STOCK

On December 4, the Brown Drug Company, Sioux Falls were robbed of their wholesale supply of narcotics that could be used by drug addicts. The supply of narcotics in your retail pharmacy might not be large enough to provoke an armed holdup like the one staged in Sioux Falls but the man who wants narcotics will stop at nothing in order to obtain them. It is your duty to safe-guard your narcotic stock no matter how small.

With regard to the pharmacist's responsibility in safe-guarding his narcotic stock, G. W. Cunningham, Acting Commissioner of Narcotics, Washington, D. C. says: "We regard a strong safe as the minimum acceptable protection for narcotics. It is true that there are professional burglars where even a safe is not sufficient protection. We consider a failure to provide at least this minimum of security a negligent handling of narcotics by the pharmacy."

RESEARCH FELLOWSHIPS
TO BE AWARDED

Ten research fellowships will be awarded for one calendar year in the fields of medicine, dentistry, and pharmacy by the University of Illinois Graduate College in Chicago.

The fellowships carry stipends of \$1,800 per year for medical and dental graduates and \$1,200 for pharmacy graduates, with exemption from tuition fees for all appointees. In unusual cases, a \$2,400 stipend may be awarded to those holding a Doctor's degree. Registration in the Graduate College for full time credit toward M.S. or Ph.D. degrees is required.

"As I See It"

by John H. Sidle, President, South Dakota Pharmaceutical Association

The threat of Socialized Medicine is here and will be here as long as we have the concentration of physicians in the city and no medical service in our smaller communities.

We the allied professions of medicine, dentistry, pharmacy and nursing do not want socialized medicine to replace our free enterprize system of caring for the sick but people do want medical care without costing them in excess of their power to pay. The present medical service in South Dakota is getting to be that and will be more so as the earning power of our people decrease with the decline of prices for farm products of if government demands more taxes to maintain the prices on farm produce.

The cost of medical care because of medical service shortage in small communities is increased in two ways. The loss of time by part of the family to travel greater distances to consult a physician and the cost of hospitalization away from home when treatment must be continued. These extra costs could be partly eliminated without danger of poorer medical service if we had more doctors trained to practice in the smaller towns. This would tend to increase the number of drug stores in small towns instead of reduction as we have now.

The principle objection to present medical service is its extra cost in time lost to the patient's family. If a doctor who may be making \$100 per day was forced to take a day off to go to the city with a member of the family and probably after being told by the office girl that they would have to wait until next Tuesday for an appointment at 1:30 P.M. and having arrived on time had to wait until 5:00 or 6:00 P. M. he would realize what time lost means to some of his patients. The average patient probably lost only his day's wages of \$8.00 to \$10.00 yet it means more to him than the \$100.00 does to the doctor as his family may have to go without meat the rest of the week because of that. Then he finds this member of his family needs daily medical attention or must be hospitalized where if he had a local physician, he could go home, the good wife could do the nursing and the

local physician could take care of the case. Do you blame the wage earner for wanting the government to pay the bill?

The loss of these physicians and drug stores to the small communities help the inroad of big business or chain stores who employ people who have lost interest in individual enterprise. As soon as the majority of the people become dependent on salary to the age of 65 years and social security after that, the nearer we are to government control of all medical and health services.

Why not see that the small communities get physicians and that your hospitals are opened to all those who have the proper training to use these facilities?

PHARMACY PROMOTIONS

The American Pharmaceutical Association has given special attention to developing the pharmacy as a public health information center. Our state association has cooperated with the A. Ph. A. to urge pharmacists to participate in these public health programs. By the use of window displays and the distribution of pamphlets pharmacists have contributed to the community's health by making the public more "health conscience."

Health promotions during the 1950 calendar year will include, Social Hygiene Day to be observed on February 1, Fund-Raising Campaign of the American Heart Association to be conducted during the month of February, Fund-Raising Campaign of the American Cancer Society to be held during the month of April (This is not a Pharmacy Week promotion as in the past three years), National Pharmacy Week, October 15 to 21, and Diabetes Detection Week at a date to be determined (probably October).

The 25th anniversary of National Pharmacy Week will feature the pharmacist as a community health builder using the educational program of the American Heart Association as an example of his helpful participation.

Separate communications will reach all registered pharmacies regarding their participation in these general public health educational programs.

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The Relation of the Pathologist to the General Practitioner

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The subject of this discussion seems extremely elementary at first glance. However, calm reflection demands that first, we define "pathologist" and "general practitioner"; second, that we review the relationship which exists at present between these two branches of the practice of medicine; and, third, that we speculate as to what can and should be done in the future in order that the two may be of greater service to each other and particularly to the patient.

Pathology is defined as the science of the origin, nature, and course of diseases. A pathologist is one who limits his practice to that of pathology. As such, he is a specialist in the practice of medicine. The so-called "clinical pathologist" has developed during the past quarter of a century. Salter,¹ an internist, has defined clinical pathology as "merely the adaption of the fruits of fundamental research to concrete problems in medical practice." Sanford,² in his presidential address before the section on pathology and physiology of the American Medical Association in 1930, said, "A clinical pathologist is a physician who devotes all or the major portion of his time to diagnosis of disease by laboratory methods. He is a histopathologist and a microscopist. He must be a serologist, a bacteriologist, and somewhat of a chemist and physicist. In this field of varied interests he must always be up-to-date and must serve chiefly as a consultant in interpreting and evaluating laboratory data for his medical brethren." This is a large order, but it indicates the diversity of the clinical pathologist's interests today and suggests the extent of his usefulness in the practice of medicine.

Someone has said that a specialist is one who knows more and more about less and less. If the pathologist is a specialist, and generally he is so considered, the definition does not apply to him. During the past twenty-five years, the pathologist has

emerged from the individual who too often was primarily interested in "deadhouse" pathology to a consulting specialist worthy of the name. He has become interested in the patient, and, as a result, is playing an important role in clinical diagnosis and in the determination of the proper form of treatment. To do so he must be familiar, not only with advances in his own specialty, but also with those of medicine in general. Truly, the pathologist of today needs to know more and more about more and more.

The same wit who defined a specialist defined a general practitioner as one who knows less and less about more and more. Certainly those of us who know general practitioners will not agree with this definition. Some prefer to call him a practitioner of general medicine, others a specialist in the general practice of medicine. Whatever his title, he remains the backbone of medicine today and its hope for the future. To be successful he must combine the art and science of medicine more effectively than any limited specialist. He also has come a long way from the horse and buggy days when he spent most of his time on the road to and from his patients, and carried all his diagnostic facilities and therapy in one or, at the most, two bags. Today, more and more of his patients are being seen in the office, and a high percentage of them are under his care in a large or, more often, small hospital. He is confronted daily with problems in pediatrics, obstetrics, internal medicine, fractures, general surgery, and last but not least, geriatrics. Surely, he, like the pathologist, needs to know more and more about more and more.

It is generally agreed that pathology is the foundation of the practice of medicine. The practitioner, general or limited, must have an

The Arthur H. Sanford Lectureship, sponsored by the Minnesota Society of Clinical Pathologist, delivered at the annual meeting of the Minnesota State Medical Association, Saint Paul, Minnesota, May 11, 1949.

understanding of the pathology of a disease in order that he may correctly diagnose it and outline its treatment. Pathological anatomy is stressed in the undergraduate training of the medical student so that the graduate in medicine, especially in these days, has a good theoretical knowledge of its contents. However, the scope of pathology has become so broad, with the developments in pathological physiology, physiological chemistry, bacteriology, immunology, serology, and hematology, that the average medical graduate cannot hope to retain more than a minimal knowledge of the subject. If he becomes a general practitioner he is too busy caring for patients with all kinds of complaints to pursue his study of these subjects except as one or possibly two of them intrigue him or, of necessity, demand his attention. The role of the pathologist is to provide this knowledge in order that the clinician may apply it in the diagnosis and treatment of his patients.

The multitude and variety of clinical laboratory tests available today is phenomenal. Which tests are of real value? Which tests should be used in a given case? These are questions which the general practitioner cannot always be expected to answer. Unfortunately only a relatively few laboratory tests are diagnostic. The presence of amebae histolytica in the stool is diagnostic of amebiasis; a fasting blood sugar of 125 mg. per cent or more invariably means diabetes; a positive Friedman test usually denotes pregnancy; and the presence of blast forms in the blood smear suggests leukemia. The well-trained chemist or technologist can and does perform most of these tests, but it requires the opinion of one who is specially trained to evaluate them properly in a given case. The general practitioner cannot be expected to do so in every instance and he needs someone to do it for him. The pathologist can and should provide this service. The large hospital or teaching institution has facilities for performing most of the laboratory tests available today. However, the small hospital, in which the majority of the general practitioner's patients are taken care of, rarely provides such complete service. Here again the pathologist can be of great service to the general practitioner in outlining the minimum laboratory procedures of value in a given case and also of suggesting other tests if the basic tests do not

supply the answer. The technician is not qualified to do this and should not be relied upon to do so.

With the growth in the number of laboratory tests, the technical difficulties in their performance have multiplied. Time and training are necessary if the results of tests performed by technicians are to be reliable. The evaluation of the newer tests requires time-consuming study. The average general practitioner does not have the time to attend to these details nor does he have the training to supervise the work of the laboratory technician. Here, again, the pathologist can be of service to him.

Undoubtedly the most important fields in which the pathologist can be of assistance to the general practitioner are in tissue diagnosis, both surgical and postmortem, hematology, bacteriology, and serology.

More and more surgical procedures are being performed in the smaller hospitals, especially in rural areas. It is just as essential, for the protection of the public and the professional growth of the surgeon, that tissues removed at operation in the small hospital be examined by a pathologist as in a large hospital. Likewise, the postmortem examination is as necessary a procedure in the small hospital as in the large hospital if the staff members are to profit by errors in diagnosis, evaluation of therapeutic measures employed, and a discussion of the pathogenesis, symptomatology, diagnosis, and treatment of a given disease. The clinical-pathological conference, conducted by the pathologist, who has the surgical or postmortem material at hand for demonstration, can be as stimulating an event in the small hospital as in the large hospital. Again, the pathologist can be of great service to the general practitioner in this respect.

Forensic medicine is a field which has not been given the attention it deserves. The quality of the testimony of the medical expert in court is being questioned, and the accumulation of medico-legal data concerning the investigation of deaths in which there is a suspicion of criminal, traumatic, or occupational origin, leaves much to be desired. Too many postmortem investigations of such cases are being performed by practitioners who are neither trained in pathology nor in medical jurisprudence. The pathologist can relieve

this situation if he is asked to perform the autopsy and to consult with the practitioner who is interested in the case.

The role of the general practitioner in the early diagnosis of cancer is more fully appreciated than ever before. The American Cancer Society is stressing the advisability of periodic physical examinations by the family physician. Usually the family physician is a general practitioner. The Society has developed a broad program of professional education beamed at the general practitioner, for if he sees the patient first he must be "cancer minded" and it is his duty to give the patient a thorough physical examination. Fortunately a large percentage of cancers can be seen or felt. Those beyond these two senses can usually be detected, even in their early stages, if the examining physician has a high degree of suspicion and is willing to refer his patient to others who have special diagnostic facilities at their command. More and more general practitioners in my area are doing biopsies of skin, mouth, and cervical lesions. From there on the services of a pathologist are essential.

The diagnosis of exfoliated cells, as popularized by Papanicolau, has placed a potent weapon in the hands of the medical profession in the war on cancer. Any general practitioner who takes the time to learn the simple technique of obtaining smears from the vagina and cervix, or of collecting sputum and urine, can complete the first step in a most valuable screening test for cancer. The next step is that of interpretation of the cells present in the prepared specimen. This requires the services of one who is trained in histology and histopathology. Undoubtedly technicians can be trained to eliminate the specimens which contain normal cells, but it requires an expert to recognize the abnormal cells. The general practitioner should understand the complexity of this problem and not be led to believe that the procedure is simple and can be delegated to a technician, no matter how well trained he or she may be. Furthermore, it should be emphasized that a cytologic diagnosis of exfoliated cells is not always the final answer. Failure to recognize malignant cells in a smear will lull the physician and patient into a sense of false security, and a positive diagnosis of malignancy may be disastrous unless it is confirmed by other examinations. The role of the well-trained and

experienced pathologist in this procedure is obvious. The method will fall into disrepute unless clinicians, and the public, realize that it is primarily a screening test for cancer, the results of which depend on the ability of the examiner to recognize individual malignant cells.

Postmortem examinations are as important in the practice of the general practitioner as in that of the specialist. A few general practitioners perform a very good autopsy, especially those who have taken an interest in the procedure during student and intern days. But the number is limited, and the most general practitioners with whom I come in contact are reluctant to perform a postmortem examination because they realize their inability to do it properly. They appreciate having a pathologist available to perform the autopsy for them. Most pathologists are glad to co-operate even though it may require much of their time. The problem of compensation for the pathologist who performs an autopsy on patients who have not been patients in his hospital is difficult because it is usually done for scientific reasons and the relatives cannot be charged for it. Clinicians must recognize this problem and give it due consideration when the financial agreements between the pathologist and the small hospital are being discussed.

The general practitioner is often confronted with problems in hematology. Advances in the diagnosis and treatment of the diseases of the blood have been phenomenal during recent years. The pathologist can be of inestimable services because of his knowledge of the peripheral blood picture in the anemias and leukemias. He supplements these studies with those of the bone marrow. Most general practitioners are not trained to do this work and, if they rely on the final judgment of the technician, they will fail to give the patient all that modern medicine has to offer. The treatments of the deficiency anemias and of pernicious anemia are well standardized at present, but a correct diagnosis must be made first unless the clinician is content with "trial and error" methods of treatment.

The development of chemotherapeutic agents and the antibiotics has revived an interest in bacteriology. Even the small hospital laboratory can perform the simpler bacteriological procedures, provided the tech-

nician has someone competent to supervise her work. This is also true of serologic tests for syphilis, brucellosis, mononucleosis, et cetera.

Blood transfusion is becoming a routine procedure even in the smaller hospitals. The danger of transfusion reactions can be minimized if the laboratory technician is well trained in the determination of the blood groups and the performance of compatibility tests. These procedures require the use of potent testing sera and a thorough knowledge of the importance of painstaking cross matchings in order that disasters may be avoided. This is particularly true in patients who have had previous transfusions or when female donors are used in whom sensitization to the Rh factor has occurred. It is true that a patient's condition may be so critical that the taking of chances by hurried perfunctory tests of the patient's and donor's blood is justified, but such instances are rare. It is far better to take a little more time and be safe. The practitioner should realize that time is required to do careful work. The pathologist, who is trained in this field, can establish standards of performance in the laboratory under his supervision and serve as a consultant when perplexing problems arise. The growth in importance of the Rh factor in blood transfusions, as well as in pregnancy and in the newborn, demands that facilities for its study be available in every hospital regardless of size. This is not a simple problem, as every pathologist will testify. Constant care must be exercised in order that incorrect results are not obtained through lack of training and experience on the part of the technician or because of the impotence of the anti-Rh serum being used. Here again, a pathologist can supervise the work of the technician and unsnarl the difficult problems that invariably arise. Few general practitioners are competent to do so.

From the foregoing I believe we can agree that the average general practitioner cannot be expected to be competent in the field of laboratory medicine and that the pathologist can be of great service to him. However, we have not discussed the availability of the pathologist to the general practitioner, and the willingness of the general practitioner to seek the services of the pathologist. There are approximately 6400 registered hospitals in

the United States. About 1600 pathologists have been certified by the American Board of Pathology to date. Of this number many are doing research work exclusively; many are teachers who do a limited amount of actual practice, and a few are engaged in a limited field in the specialty. A small number of pathologists are not certified, either by choice or through inability to qualify. Quite a number of clinicians work in pathology on a part-time basis. From these figures it is apparent that the ratio of hospitals to pathologists is about four to one. The 6400 registered hospitals includes many with less than fifty beds. However, there are a large number of hospitals with a bed capacity of 75 to 150 which do not have the services of a pathologist, even on a part-time basis. The reasons for the shortage of pathologists are numerous. It is true that a different temperament is required of the pathologist than the clinician. Too often medical students and interns have been discouraged from going into pathology because the pathologists with whom they have come in contact have been of the "recluse" type and have not manifested sufficient interest in the patient or in the welfare of the profession. The American Society of Clinical Pathologists has recognized this problem for several years and has taken steps to correct it through an educational campaign among its own members and also directed toward hospital interns and residents. The recently organized College of American Pathologists is stressing the same program. The greatest deterrent, however, has been the economic insecurity of the pathologist, at least until the past decade, and the reluctance of many clinicians to accept the pathologist as a full-fledged member of the hospital staff. Pathologists in general have done well financially of late, but there still exists a tendency on the part of hospital authorities to exploit the pathologist and to make the clinical laboratory cover the deficits incurred elsewhere in the hospital. Clinicians can help to remedy this situation by insisting that the pathologist be adequately compensated for his work, commensurate with his ability. They can also contribute to his financial security by refusing to patronize commercial laboratories operated by laymen, and by discouraging the use, development and expansion of so-called "free" laboratory services in institutions owned and operated by gov-

ernmental agencies through tax funds. No one will deny that the public health laboratory has a legitimate function in the diagnosis and control of communicable diseases, but it should not be permitted to offer other diagnostic tests free of charge for patients who can afford to pay for such services. The pathologists of Minnesota and of my state are willing to perform laboratory tests and tissue examinations on any patient certified as medically indigent by his physician provided he is also contributing his services.

Clinicians generally are awakening to the danger of governmental intrusion in the fields of pathology, radiology, and anesthesiology because it may well serve as the entering wedge to a complete socialization of the practice of medicine. Much is being said these days by planners, in and out of government, about "diagnostic centers" and "diagnostic facilities." Ostensibly the purpose is to provide facilities for diagnosis, such as x-ray and clinical laboratories, where they do not already exist. If so limited, they would undoubtedly be of great service to the practitioners located in rural and the smaller urban areas. However, they must be subject to local control, as they may be the means by which an ambitious bureaucracy will gradually encroach upon the practice of medicine. Pathologists are vitally interested in this subject, for they realize that a government sponsored and subsidized facility may develop into a vast system of similar facilities located everywhere, including those areas which are adequately served by private facilities and thus replace the present system of private enterprise. Clinicians, especially the general practitioners who might be tempted to look with favor on such a form of government subsidy because it promises to offer facilities which are not presently available to them, should scrutinize this movement carefully before endorsing it. Many small communities in the north central states are demonstrating, by co-operative effort, under the guidance of local lay and professional leaders, that they can solve their own problems of providing adequate hospital and diagnostic facilities. More communities should be encouraged to do likewise.

If the number of pathologists increases, and there is every indication that it will, what can be done to locate them where they are

needed? The American Medical Association is stressing the importance of the general practitioner in the practice of medicine, and its committee on rural health, with the assistance of the organized farm groups, is co-operating in every way possible to provide more practitioners in the rural areas. The Hill-Burton Construction Act has stimulated interest in the building of hospitals and health centers where they are needed. These facilities will provide the general practitioner with a place in which he can care for a large majority of his patients. But what about the supply of nurses, technicians, anesthetists, and especially pathologists? The answer would seem to lie, so far as the pathologist is concerned, in a coordinated network of health centers, rural hospitals and district hospitals, in which the pathologist would have his headquarters in the district hospital. He would supervise the laboratory work in the rural hospitals and health centers through regular visits. With modern methods of transportation the pathologist could answer emergency calls within an hour or two. Perfection of such a system would place the pathologist within easy reach of the practitioner, and those tests, including the preparation of tissues for diagnosis, which are not performed in the smaller laboratories, would be done in the central district hospital laboratory. This plan conforms to the general outline of the federal government's planning. The details of finances would have to be worked out, but this would be relatively simple if all concerned, including the practitioners and the hospital authorities, agree that the pathologist is a physician and must be adequately compensated for his services if he is to remain in the area. If successful, the plan would result in better medical service in the rural and small urban areas, where the clinical work will undoubtedly be performed primarily by the general practitioner.

It is a common observation that the level of medical practice in a community is dependent, to a large degree, upon the quantity and quality of pathological service available. Decentralization, rather than centralization, is the present emphasis, and the general practitioner is the key figure in this movement. He must have every assistance possible, in order that he may offer his patients the very

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Problems Relating to Intestinal Obstruction

by

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Introduction

In order that thinking may be precise, it is essential for the physician to keep in mind the differentiation between small intestinal obstruction and obstruction of the colon. With the advent of technical methods for emptying the small intestine at laparotomy, the tendency has been to return in most cases to a policy of immediate surgery for cases of small intestinal obstruction. Nevertheless, sharp distinction between colon obstruction and small intestinal obstruction makes a great difference in the type of surgical approach, and therefore this distinction remains of paramount importance.

Etiology

In obstructions of the small intestine adhesions and adhesive bands comprise more than one-half the total number of cases in most series.¹ The second most important cause of obstruction is external hernias. All other causes of small bowel obstruction including intussusception, gall stone obstruction, neoplasms, and etc., fall into a group comprising less than ten percent of all small bowel obstructions.

In the large intestine, on the other hand, two-thirds of all obstructions are due to carcinomas arising in the colon. The remaining one-third are made up of volvulus of the cecum or sigmoid, and diverticulitis of the sigmoid colon for the most part. Secondary tumors and secondary inflammatory processes in the pelvis comprise almost all the remaining.

The development of the signs and symptoms of intestinal obstruction

Small intestine: With the development of obstruction without interference with the blood supply, distention above the point of obstruction in the ileum quickly occurs. Experimental evidence indicates that the rate of secretion of fluids above this point is increased following obstruction, and that the

great bulk of the gas which accumulates is due to swallowed air.² With the increasing distention of this segment, just above the point of obstruction, gas and fluid separate out from one another and there is an increased tension on the wall of the bowel. This increased tension gives rise to the painful sensation which the patient appreciates with the arrival of each new peristaltic wave from above. This is the cramp of small bowel obstruction, and it is appreciated by the patient at intervals varying from three to ten minutes, but extremely rare any longer. With the presence of gas and fluid, the arrival of new material from above is associated with noises which are high in pitch due to the increased tension on the bowel wall. This is the borborygmus which, heard simultaneously with the patient's cramp, is practically pathognomonic of small bowel obstruction. Accumulation of material results in the dumping of fluid and gas back into the intestine so that the patient regularly vomits with small bowel obstruction. Distention is greater, of course, in the low small bowel obstruction, where a larger segment of bowel becomes distended than is the case with higher small bowel obstruction. Since the lower one-half of the ileum is the great water absorbing area, low small bowel obstruction is not accompanied by great difficulties with water loss, but in the high small intestine, many liters may be lost each day, and dehydration and loss of chloride may be a serious problem.

Large intestine: With the onset of large intestinal obstruction, there may be one or two bouts of vomiting. Because, however, the ileocecal valve remains competent, most patients do not have persistent vomiting. The cramps are rarely significant, and when present are ordinarily widely spaced. Because most cases of colon obstruction arise from carcinoma, one usually obtains a history of gradually increasing constipation with or without alternating diarrhea over a period of

months before the acute episode.

Mechanisms of death in unrelieved intestinal obstruction

Small intestine: The most important mechanism of death in small intestinal obstruction is related to interference with normal water balance. If the obstruction is in the upper one-half it is found that the fluid lost by vomiting is large. Normally from five to twelve liters pass the duodeno-jejunal junction daily. Loss of such quantities with the contained chloride ion is not tolerated. These patients, therefore, quickly become dehydrated and depleted of salt. Because of inadequate water for kidney function, uremia quickly appears. The second important mechanism of death in small bowel obstruction is prolonged distention. A great deal of experimental work has led to the conclusion, as Wangenstein points out, that products of bacterial action are allowed to pass through the mucous membrane because that mucous membrane has been injured by inadequate blood supply. The blood supply in turn has been compromised by the stretching of the wall of the intestine with consequent attenuation of the vessels in the structure of the wall. The absorption appears to be by way of the peritoneum and the lymphatics in the upper portion thereof. The third important mechanism of death in small bowel obstruction is strangulation with necrosis of segments of the intestine and terminal sepsis or peritonitis.

Large intestine: The mechanism of death in obstructions of the large intestine which is most important is perforation of the anterior wall of the cecum due to tension gangrene. Because the ileocecal valve ordinarily prevents reflux into the small intestine, the colon between this point and the obstructing lesion becomes involved in a closed loop obstruction. Tension on the wall attenuates the blood vessels and gangrene occurs on the thinnest and most poorly supplied portion. Very occasionally strangulation of other segments, as in volvulus, may also be important. Perforation immediately adjacent to carcinomas also sometimes occurs.

Diagnosis of intestinal obstruction

Small bowel: As Table 1 indicates, the symptoms of small bowel obstruction are fairly characteristic. The presence of cramps

coming simultaneously with borborygmi is almost pathognomonic. Distension is variable according to the level. Vomiting is persistent, and usually striking. Enemas are rewarded by return of the enema only. X-ray films show distended segments of small intestine usually arranged in ladder-like fashion. The signs of strangulation are many, and conservative therapy is not to be condoned in the presence of any of these signs. These are a history of sudden onset, the presence of back pain, the presence of shock, the presence of signs of infection such as leukocytosis or fever, and the signs of peritoneal irritation, such as spasm and rebound tenderness. X-ray findings suggestive of a double coffee-bean appearance should be looked upon very suspiciously.

Colon obstruction

In obstructions to the colon, in contrast to those of the small intestine, vomiting is usually absent or at least not at all striking. There is usually a history of progressive constipation over several months. Neither the cramps nor the sounds heard on auscultation are at all striking. Particularly in lesions of the left colon, the distension may be very marked. Enemas ordinarily are not rewarded with returns. The x-ray findings in obstructions of the large intestine are varied, and are too involved to bear much discussion in such a paper as this. In about two-thirds of the cases, however, the gas seen is contained entirely or almost entirely in the colon. It should be remembered that about ten percent of these cases, however, present very marked distension of the small intestine as well as of the colon.

Therapy

Small intestine: The arrival of new techniques has made possible a change in the general attitude toward the application of surgery to patients with small bowel obstruction. At the present time, the attitude of most members of Dr. Wangenstein's group is that nearly all patients with small bowel obstruction are most safely dealt with by fairly early exploration. This must be delayed until fairly adequate hydration has been accomplished. The patient with obvious dehydration has lost about seven percent of his body weight in salt and water. In most instances this can be safely made up in these patients

by the administration in the first twenty-four hours of seven percent of the body weight made up with half the volume consisting of isotonic sodium chloride solution, and the other half of the volume made up of five percent glucose in distilled water. Half of this twenty-four hour allotment should be given in three or four hours before early exploration is undertaken. It is only in those cases presenting none of the symptoms suggestive of strangulation that one may be justified in conservatism. In these cases, it is necessary to pass a tube of the Miller-Abbott variety into the small intestine for purposes of conservative decompression. Failure to pass the tube, or failure to decompress after passage of the tube, constitutes a positive indication for surgery within thirty-six hours.

Exploration in these cases ordinarily is most safely done through a right mid-rectus incision or through a transverse incision in this same area. This should not be undertaken unless the operator is in a position to decompress the bowel aseptically as described in Wangenstein's Second Edition, or with the revisions more recently applied.³ By virtue of this device, one can explore the greatly distended patient with much more security than was previously possible.

The techniques for dealing with such mechanisms as gall-stone obstructions, obstructions due to femoral or inguinal hernias, obstructions due to neoplasms, and the methods for performing end-to-end anastomosis under these circumstances are specifically not covered because of lack of time.^{4, 5} Nasal suction siphonage must be maintained post-operatively until the passage of gas by rectum.

Colon: The treatment of obstruction of the colon is much debated. At the University of Minnesota Hospitals the feeling is strong that for left colon lesions a transverse colostomy is the safest method of procedure. It is important that this be done through a transverse incision in the right upper quadrant rather than through a longitudinal incision. A glass rod can be passed through the mesentery and very few sutures made to the fatty tags of the bowel. Decompression should not be undertaken ordinarily until some hours have passed thereafter. Cecostomy here has a bad reputation. Cases involving the ileocecal valve or the ascending colon may be dealt with by term-

inal ileostomy more safely than by cecostomy in our experience. In some of these, aseptic decompression followed by primary right hemicolectomy have been very successful.

Conclusions

Better management of intestinal obstruction can only be attained by sharp recognition of small bowel as opposed to colon obstruction. Only by careful study and recognition, and by careful hydration and attention to nutritional factors such as adequate serum protein and hemoglobin levels will it be possible to reduce our mortality rates. Development of the techniques of surgical procedures are intentionally omitted from this presentation. The tendency at the University of Minnesota Hospitals and the Minneapolis General Hospital is now to approach obstructions whether in the large or small intestine primarily by surgical rather than by conservative means.

TABLE I.
Signs and Symptoms of Small Bowel Obstruction

Simple
Cramps
Borborygmi
Distension
Vomiting
Obstipation
X-ray signs
Signs of Strangulation
Sudden onset
Back pain
Shock
Leukocytosis or fever
Spasm or rebound tenderness
X-ray signs

TABLE II.
Signs and Symptoms of Colon Obstruction

Usually progressive constipation
Vomiting not striking
Minimal cramps
Minimal sounds
Distension
Obstipation
X-ray signs

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Rupture of Pregnant Uterus into Vagina

by George E. Whitson, M.D., F.A.C.S.
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I wish to make a brief report of a very unusual case. I am unable to find any reference to it in the literature or to find any of the authorities on obstetrics and gynecology who have ever seen a similar case. There are many articles dealing with the rupture of the uterus into the peritoneal cavity, but none dealing with rupture directly into the vagina. My patient was a 22-year old, primigravida. She had her last menstrual period on Feb. 24, 1939, and was estimated to be due on Dec. 1, 1939. The patient's general physical examination was essentially negative. Her Wasserman was normal. Her pelvic examination and pelvic measurements were normal. On Nov. 14, 1939, the patient was ironing and suddenly had a gush of blood from her vagina. She came to the office immediately for an examination. The bleeding was rather profuse. The patient was admitted to the hospital and a sterile prep made and a vaginal examination done. High up in the vaginal fornix posterior to the uterus I could insert a finger into the uterine cavity and could feel the margin of the placenta at this point, with the placenta covering the cervical opening.

The patient was bleeding considerably and was prepared immediately and taken to the operating room.

A low cervical cesarean section was performed under general anesthesia. The baby was normal, and on examination of the uterine cavity, the placenta was found to be attached over the cervical opening, partially on the anterior and partially on the posterior wall of the uterus. At the margin of the posterior attachment of the placenta, there was an opening directly from the uterus into the vagina, with no opening into the peritoneal cavity. There was no free blood in the peritoneal cavity at the time of the operation. A drain was placed through this opening into the vagina and the uterus closed in the usual manner. The patient made a very uneventful

recovery from the cesarean. She required a transfusion during the operation.

About three weeks post-operatively, under local anesthesia, the opening in the posterior wall of the vagina was closed. This healed up very quickly and the patient had no symptoms whatsoever. A small opening persisted for a short time, but the patient had no drainage or difficulty from it.

I had occasion on Jan. 8, 1942, to re-operate this same patient for acute appendicitis. At that time the abdomen was explored and the pelvis was found to be normal, with the exceptions of some heavy adhesions of the broad ligament to the abdominal wall on the right side, which undoubtedly resulted from the previous rupture of the uterus. This was left as it was. The patient has had no plevic trouble since this time.

(Continued from Page 43)

best in medical service. The pathologist can play an important role in this development. However, the practitioner must appreciate his worth and his ability to contribute to the practice of scientific medicine, and he must desire his services. In the final analysis the practitioner has the patient; the pathologist has only his ability to serve when called upon by the clinician. It is the earnest desire of pathologists to join in a cooperative effort with practitioners everywhere in order that all the people may enjoy the benefits of modern medical practice. We are all practitioners of medicine. We are all dedicated to the prevention of disease and the relief of suffering. United we cannot, we will not, fail to fulfill our mission and to preserve our heritage of a free and unfettered profession.

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SUMMARY OF THE 60th ANNUAL MEETING
of the
ASSOCIATION OF THE AMERICAN MEDICAL COLLEGES
held at
Colorado Springs, Colorado
on
7, 8 and 9 November, 1949
by **Donald Slaughter, M.D., Vermillion**

The 60th meeting was held in the beautiful Broadmoor Hotel in Colorado Springs, Colorado, which is situated some 6,000 feet amid the rugged Rocky mountains. To say the least this was a beautiful setting and definitely was an inspiration for the entire conference.

The meeting this year was distinctly different from any of those previously held in that with the exception of one or two addresses the meeting was split into round-table groups of three in number. These groups had to do with (1) admissions, (2) curriculum and (3) internships, respectively. As we registered, we were given either a white, blue or red card and then we rotated through the three groups noted above. This way we were able to participate in all of the very important three phases of medical education covered at this meeting.

On Monday morning a most inspirational address was given by President Virgil M. Hancher of the State University of Iowa. He discussed the social responsibilities of medicine, and his talk was the highlight of the meeting by all odds. He pointed out that the most important responsibility of medicine today is seeing to it that it is understood by the public. In his opinion, the alleged shortage of doctors and poor medical service is believed to be true by the public. If it is not true, then medicine must clarify this situation, or if it is true, physicians must do something about it in a positive manner. He believes that we shall surely have government medicine if the profession does not take care of the alleged shortage and the alleged poor medical service.

Medicine, he said, must be willing to take its part in the solution of the trends of our times. As analogies he pointed out that the farmer and the laborer decided some 15 years ago that they would never again face the crisis that they did at that time alone. As it

now stands, President Hancher said that labor and agriculture have plenty of allies to see to it that they will never go through such a crisis as they did some 15 years ago. Medicine, he said, must also decide to properly recognize its social responsibility and ask that others share this responsibility with them. Medicine must prove to the public that it does take the lead in solving the problem of expensive medical care and that it is truly and wholeheartedly in favor of prepayment medical insurance and hospitalization.

He further pointed out that it is his belief that group practice is one of the answers to better medical service in this country.

His last remarks were unusually keen in that he said he did not believe that a real study of the medical needs of this country have ever been made. He thought it was high time that such was done and, furthermore, he doesn't believe that medical education should cost as much as it does in some schools. He raised the question, "Can we prove the necessity of the high cost of medical education" and he also asked the question whether or not the increase would keep going on for years and years at the expense, perhaps, of some of the other professions.

On Monday morning following President Hancher's talk I attended the round-table discussion on curriculum planning and the chairman of this panel was Doctor Ward Darley, vice president of the University of Colorado. The panel discussants were Deans C. C. Carpenter of Bowman Grey, E. L. Turner of the University of Washington, C. N. H. Hughlong of Yale, and L. R. Chandler of Stanford.

Doctor Darley pointed out in his introductory remarks that we must be willing to experiment with the curriculum and that departments and individuals must be willing to give up their complete identity if a really progressive curriculum will ever be formed. He did stress the fact, which I was glad to

hear, that no two schools will have or probably ever should have the same curriculum.

It was his opinion that the aims and philosophies of the curriculum were probably the most important facets of the whole business of medical education. He raised the question "what should these aims and philosophies be." He started to answer it by saying first of all that they should not be such that medical education was spoon fed but rather medical education must be taught so that the student would be stimulated to learn. He used the old-time adage with which we are all familiar, "you cannot teach a student anything, you can only stimulate him to learn something."

The outstanding aim, in Doctor Darley's opinion, is to give a sound basis of the fundamentals of medicine on which the graduating physician is able to practice medicine with only slight supervision. Secondly, he said that the student should be critical and intellectually honest above all.

In the discussion that followed it was pointed out that it is not possible to separate medical education and medical care because medical care involves medical education and the reverse is also true. Many stated that they wished that medical education could be broad enough so that the doctor had a better idea of human values. Along this line someone suggested that the physician should reorganize his place in public affairs so that he would become the leader in civic affairs. In some instances it was felt he had slipped as compared with the days gone by. Finally, a great deal of emphasis was placed on the fact that a curriculum should be arranged so that the student gets to thinking along the social aspects of medicine as well as scientifically.

On Monday afternoon I attended the round-table discussion on admissions problems. Presiding was vice-president Carlyle Jacobsen of Iowa, Doctor Harold Davenport of Northwestern University, vice-president James Perkins of Swarthmore College, Doctor Leland Parr of George Washington University, and Doctor Joe Markee of Duke University; all of the above gentlemen with the exclusion of the chairman having to do with admissions in their respective institutions.

Doctor Jacobsen started off the discussion by asking what kind of a student do we want. All of us have asked that question more than

once and have never obtained the proper answer. He did say that there were certain fundamentals which surrounded the choice of the proper kind of student. First of all, we want to secure competent physicians. Secondly, we want to pick potential teachers and investigators. Thirdly, we want to pick a student who will not fail in his medical school work. Fourthly, we want those students whom we select to maintain high ethical standards. Finally, we want a student who is sensitive to the social and economic trends of the times.

Doctor Jacobsen then asked just how we identified these prospective students. After a good deal of discussion it was decided that grades in pre-medical school were the best indication for grades in medical school. This did not mean that the grades in pre-medical school would tell us what kind of physician we would graduate but it definitely was indicative that we would graduate a better than average doctor.

Doctor Markee discussed at some length the information which we get as admission committees from people whom the students list as "references." It is his opinion that pre-medical committees should take more of an active part in helping to select the best potential medical students. Several of us stated that at our institutions we had excellent cooperation and support from the pre-medical advisory committees and we believed that this was the best method of obtaining proper information on prospective students. All agreed to a man almost that a recommendation from a physician was not worth the paper it was written on, ha!

Discussion finally suggested that admissions committees could do well to place weight on (1) work habits (2) motivation (3) attitudes and (4) diligence. Obviously, these qualities can best be evaluated by the pre-medical advisory committee.

In the final part of the discussion it was suggested that it would be well for the various medical colleges to not only call on the pre-medical advisors in the various schools from which come most of the various prospective students, but that in addition it would be well to have one day set aside in the late spring or early fall for a meeting with all of the pre-medical advisors at the University which houses the medical school. I should

like to respectfully request that we plan on such programmes as outlined above. This would constitute calling in those interested in pre-medical education in the various colleges of South Dakota and also of Morningside College of Sioux City, Iowa. One of the discussants at this round table went so far as to suggest that after all, the pre-medical advisory committees might as well select the medical students and not bother the medical instructor and professors. However, this seemed not to be in good taste and nothing was done to add to the weight of this suggestion.

The question of interviews was discussed at some great length and when it was all over there wasn't much to be added to the usual procedure of either interviews singly or in groups of three. This year, our admissions committee is interviewing three students at a time and while we have only had a trial run, it is felt that this will supplant the interview of a single student by each one of the various committee members.

On Tuesday morning the presidential address was delivered by Doctor J. Roscoe Miller, president of Northwestern University. In his talk, Doctor Miller emphasized the need for various medical schools to build their method and philosophy of education around geographical centers which they represent. He also called for a more forthright presentation of ideals and philosophies by the Association of American Medical Colleges and implored the fact that in the past too often other agencies and individuals had taken the lead in medical education. His address, to say the least, was very well received and it was one of the highlights of the entire meeting.

Following the presidential address, I attended the round table discussion having to do with internships. The chairman of this panel was Doctor John B. Youmans, Dean of the University of Illinois. The discussants were Dean Myron M. Weaver of the University of British Columbia, Doctor Arthur C. Bachmeyer of the University of Chicago, and Doctors Reginald Fitz and C. T. Dolezal of the Harvard Medical School and the American Hospital Association, respectively. The theme for this discussion stemmed around making the internship a planned educational experience. It was the thought of some of

the group that in the past the internship had become in certain of the larger hospitals more or less a "super-externe-ship" or a laboratory "diagnosis-ship." There was in the opinion of many too much ordinary routine work for the intern to do so that he did not have the opportunity of really learning what he should with respect to medicine per se. There were those who argued that the internship was not and should not be an educational experience but rather it should be a type of preceptor or apprenticeship experience. The argument raged considerably hot concerning this particular proposition and I gathered that the consensus of the opinion leaned towards the planned preceptor or apprenticeship rather than a true educational experience as we think of education in relation to the other facets of medical education while the student is still in college.

On Tuesday afternoon the usual executive session was held and many points of information and importance were discussed at this meeting.

Doctor Joe C. Hinsey of Cornell College pointed out that Alabama was the only medical school in the United States not represented. He discussed the plea of certain societies for the Association to enter into the discriminatory matter of entering medical students. He stated that since the Association had never interfered with the race, creed or color of any student admitted that it did not seem practical for the Association to take a definite stand at this time.

Doctor Smiley pointed out that in 1948 there were 81,662 applications for medical schools. 24,224 students made these applications. 6,148 students had one acceptance, 679 had two acceptances, 125 had three acceptances, 24 had four acceptances, 6 had five acceptances, and one had eight acceptances. On a comparative basis he found that there were 3.7 applications per student made during 1948. There were 6,497 medical students finally admitted to the various medical schools in 1948 and so this meant that one applicant for every ten students received an appointment.

Doctor Lowell Reed of John Hopkins told us that the U. S. Public Health Service gave about $\frac{1}{4}$ of all the money that was used for medical research — money, that is, that was budgeted directly for research.

Doctor Carlyle Jacobsen reported on the personnel practice committee and pointed out that medical schools should advise the various pre-medical colleges that the medical aptitude test in 1950 would be given on 13 May and on 5 November. These examinations would cover those wishing to enter in 1951.

Doctor Hinsey reported that the Senate has passed S1453 which bill has to do with giving aid to medical education. He said the House undoubtedly will pass a similar bill early in January of 1950.

Doctor Bachmeyer reported on the survey of medical education and said that it is intended that pre-medical education, undergraduate education and internship education would be covered in the survey. At this point I think it is well to remind those who will read this report that the University of South Dakota Medical School was the first two year school in the survey and was the second school which was surveyed.

CUFF NOTES

The Effect of Dicumarol Upon Postoperative Peritoneal Adhesions.

Results of experimental studies on 26 dogs show that Dicumarol is effective in reducing the extent of postoperative adhesions under the conditions of the experiments. Dicumarol reduced the extent of adhesions over 200 per cent.

Anti-coagulant therapy for four days post-operatively appears to be as effective as for longer periods of time. Beverly H. White, *Annals of Surgery*, Nov. 1949.

Concepts of Myocardial Ischemia

Many factors upset the balance between oxygen supply and work requirements of the heart muscle. This results in general or local myocardial ischemia. Coronary diseases are the most important but not the only factors leading to the appearance of the syncrome.

The syndrome of myocardial ischemia is characterized by pain, E K G changes and remote reactions secondary to tissue destruction. Pain is an unreliable guide. E K G changes are determined by the intensity of the process and location of the lesion.

In myocardial infarction the signs of gross tissue destruction are added to those of ischemia.

*Edited by Don Manning, M.D.

In decompensated ischemia the signs and symptoms appear when the patient is at rest. If an appreciable amount of cardiac reserve is still available and objective diagnosis can be made only by appropriate functional tests.

Myocardial ischemia from any cause tends to improve spontaneously in many instances. Under palliative treatment the majority of patients may be returned to a useful life once they have learned to adjust their activities to their limitations. Hans Hecht, *Archives of Int. Med.* Nov. 1949.

Gleanings

The last war didn't — as so often it is alleged war does — significantly increase the proportion of male births to female. In recent years (white) American boys appeared at the settled rate of 106 plus for each 100 girls.

Muscle cuts of beef from the various anatomical parts of a young steer and an ancient cow were tested for nutritional values. Though insignificant differences do exist, essentially they were all of the same nutritive worth.

Potentially Dangerous Gadgets

Three kinds of radiation injury may follow the use of shoe fitting X-Ray machines: Abnormal development of the child's foot, acute radiation burns, and chronic injury to blood forming organs (of the attendant), all three can be prevented.

Brucellosis ranks as the most prevalent disease of animals transmitted to man.

Ten Danger Signals of Staff Deficiencies in Hospital Medical Care.

1. More than 10% normal tissue removal at surgery.
2. More than 4% or 5% Caesarian Sections.
3. High Death rate.
4. More than 1/4 of 1% maternal death rate for OB patients.
5. More than 2% infant mortality.
6. High rate of disagreement between pre-operative and post-operative diagnosis.
7. More than 1% post-operative infections.
8. Low percentage of consultations (below 15 or 20%).
9. More than 1% post-operative death rate for surgical patients (during first ten days after surgery).
10. Post anesthesia complications.

Arnold Rivin, Trustee, December 1949.

Gleanings

It is a sad failing of the human race that in its many efforts to raise the standard of living for all people, the usual result is that far more people end up with less than before.

pHisoderm with Hexachlorophene (G 11). Its Integrity as A Surgical Scrub.

pHisoderm as above has been used as a four minute brushless scrub technique in 1,500 clean cases with a wound infection of 1.6% and in 430 potentially dirty cases with an infection rate of 3.95%. The results suggest that this method is as safe as any previously described scrubbing method.

Sodium Succinate—Analeptic for Barbiturate Poisoning.

Sodium succinate is indicated for the treatment of "suspected" or "probable," as well as actual barbiturate poisoning in man. This indication is based on the following: 1. its analeptic effect without, apparently, the possibility of producing convulsions. 2.

Sodium Succinate

2. its non-toxicity. 3. its demonstrated property of aiding in the reestablishment of the status quo in the poisoned patient.

14 case of True barbiturate poisoning reviewed.

1. case of suspected B P, later proved to be a cerebral accident, in coma, aroused easily but later died — condition was helped — certainly convulsant drugs would have been contraindicated.

30% aqueous solution of hydrated salt of sodium succinate used.

Initial dose 3 to 5 cc IV rapidly. Typically a cough occurs which is a sign of adequate initial dose. If no cough appears in 10 to 20 seconds initial dose is repeated. Then IV injection continued until a definite analeptic response is produced such as groaning or moving of body, opening the eyes. Occasionally takes 30 to 45 grains (100 to 150 cc). Richard H. Barrett, *Annals of Int. Med.*, Nov. 1949.

(Continued from Page 46)

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4. Dennis, Clarence: Oblique, aseptic, end-to-end ileac anastomosis, procedure of choice in strangulating small bowel obstruction. **Surg., Gynec., and Obst.** 77:225-242, September, 1943.
5. Dennis, Clarence; Varco, Richard L.: Femoral Hernia with gangrenous bowel. **Surgery** 22:312-323, August 1947.



From where I sit
by Joe Marsh

Sure You Haven't a "Blind Spot"?

As I was driving down Main Street last Saturday, another car swung out right in front of me. It turned out to be Buck Blake. He wasn't going fast. It was just that he had something else on his mind at that particular moment.

Buck's really one of the nicest fellows I've ever known. But, sometimes he gets to day-dreaming on the road. He sort of gets a "blind spot" to what's going on about him!

Now, lots of normally considerate folks have their "blind spots." It could be anything from day-dreaming while driving a car to humming out loud at the movies.

From where I sit, it's mighty important to be on guard against your own "blind spots." The other fellow has a right to his "share of the road," too—whether it's having a taste for a temperate glass of sparkling beer or a desire to listen to some classical music if he wants to.

Joe Marsh

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**REPORT OF DELEGATE TO A.M.A.
INTERIM SESSION — WASHINGTON, D. C. — DEC. 6-9, 1949**

The Washington, D. C. clinical session of the A.M.A. was attended by more doctors and visitors than any previous interim meeting. Approximately 5,000 doctors were registered and, of these, more than 3,000 were fellows of the association. The total attendance was in excess of 8,000.

The clinical sessions and scientific exhibits covered the field of medicine very broadly from the general practitioner's view point and were well attended. Motion pictures, black and white television, and particularly color television also evoked much interest from those in attendance.

At the opening session of the House of Delegates, 187 of its full complement of 192 were seated. The first item of business was the selection of the "General Practitioner of the Year." Nominees submitted by the Board of Trustees included Dr. Andy Hall of Illinois, our own Dr. Lyle Hare, and Dr. Thomas Rhine of Arkansas. Dr. Andy Hall was awarded the 1949 gold medal for "exceptional service by a general practitioner."

The House of Delegates amended the By-Laws to provide for the levying of annual dues on active members of the A.M.A. Your delegate was one of the five members of the Reference Committee considering this subject, and can state that the hearings were characterized by large attendance and intense interest. Practically no opposition was expressed to levying dues, but much discussion centered around the mechanism for accomplishing the task. Following enactment of the provision for annual dues, the Board of Trustees recommended to the House that the 1950 dues be set at \$25.00. This action was then voted by the House without dissent.

The new regulation will require each member to pay his \$25.00 A.M.A. dues for 1950 through his State Association to the A.M.A. Provision will be made to exempt retired and disabled physicians and those to whom such payment would be a financial hardship, such as internes, residents, etc. Failure to pay the dues within 30 days after notice of delinquency will forfeit membership in the Association. Membership will now entitle a

member to attend the scientific sessions which previously had been limited to fellows.

Fellowship status in the A.M.A. is unchanged. Dues for fellowship remain at \$12.00 per year and entitles the individual to subscription to the Journal or other of the A.M.A. scientific publications.

The American Medical Association, like other great national organizations, must depend on dues from its membership to support its growing program of service, both to the profession and to the public."

Many other matters were considered and acted upon by the House of Delegates. Each member is urged to read the proceedings and other reports in the Journal to familiarize himself with these. The need for brevity precludes their discussion in this report.

Of paramount interest were reports dealing with the Educational Campaign. In the first 11 months of 1949, \$2,250,000 were collected by voluntary assessment. The assessments were collected from about 80% of the physicians who could be expected to contribute. A.M.A. membership includes a great many retired physicians, internes, residents, and others who could not be expected to participate. The percentage and the total collected constitutes an excellent record of physician support in this volunteer effort.

Of the \$2,050,000 already budgeted, 75% has been expended for literature and campaign material, 10% for organizational work, and 15% for operational expense. More than 55,000,000 pieces of literature have been distributed.

A feeling of satisfaction prevailed with regard to the progress, present status, and results of the National Educational Campaign to date. Likewise a strong fighting feeling was evident, best characterized by the desire and intention to intensify our efforts in the coming year, to the end that political domination of the profession and socialistic regimentation of American life will be prevented.

Respectfully submitted,
H. Russell Brown
Delegate to A.M.A.

December 24, 1949

EDITORIAL PAGE

A.M.A. DUES

For the first time in its history, the American Medical Association will levy dues on its active membership. This action was voted by the House of Delegates at the Interim Session in Washington, D. C. on December 9, 1949.

Prior to this time, the income of the A.M.A. has consisted of the revenue received from its various publications. "Membership" has been granted to all who were reported as members by its constituent State Medical Associations. Such "members" have never been required to contribute to the financial support of the A.M.A.

"Fellowship" has been available to all members of the A.M.A. provided that they have applied for it and have paid \$12.00 annually to cover subscription to the Journal or any other of its scientific publications. As of October 1, 1949, only 41% of the members in South Dakota were Fellows.

Recognizing the need for increased revenue, the House of Delegates at its June 1949 meeting instructed the Board of Trustees to study the matter of annual dues and report at the December 1949 meeting. Thus, lengthy and careful consideration has been given to this action. When the Board of Trustees recommended the establishment of annual dues and further, that they be set at \$25.00 for 1950, the House of Delegates took action to that end without dissent.

Under the new regulations, all members will be required to pay annual dues to the A.M.A. through their State Associations. For 1950 the dues will be \$25.00 and are payable on January 1, 1950. Provision will be made to waive the dues of retired members and others for whom the payment of dues will be a hardship because of physical disability or other specified reasons. Fellowship will be granted to members of the A.M.A. as before. Thus, a fellow will pay \$12.00 (additional to his membership dues) to cover the subscription cost of the scientific publication of his choice.

In South Dakota the procedure for collecting A.M.A. dues will be determined and announced during January.

GULLIBLES' TRAVELS

January 9 — Attend a hospital membership meeting in **Freeman** and talked to the group about the values and responsibilities connected with having their own hospital. **Drs. Hofer** and **Kaufman** of **Freeman** also commented on the progress of the hospital drive.

January 11th & 12 — Traveled to **Winner** by bus to discuss the Cooperative Hospital situation with the local doctors and the hospital administration. Visited with **Drs. Studenberg, Morgan** and **O'Brien** who practice in private capacities and with **Dr. Clark** who is employed by the hospital.

Remained in the office until the 16th when I drove to Canton with Vern Olson of the Farm Bureau to discuss the South Dakota Illness Expense Plan with the county unit of the Bureau.

January 25th — Started to drive to Sioux City to attend the Sioux Valley Medical meeting but went into a spin and ended in the ditch with no harm done. The speed of the spin on snow-glazed ice was enough to persuade me to return to Sioux Falls. Spoke to the Sioux Falls Druggists Association at the Cataract Hotel at a late evening meeting.

RESEARCH GRANT FOR U. OF S. D. MEDICAL SCHOOL

The University of South Dakota Medical School has received a research grant of \$4,400 from the United States Public Health Service. The money will be used to continue a study of pathological changes resulting from nutritional deficiencies in animals. This work was begun by Dr. R. L. Ferguson, professor of Pathology, and Dr. Charles Schwartz, research associate professor of biochemistry. Dr. E. B. Scott, assistant professor of anatomy, is also working on the project. The grant was made for a period of one year starting February 1, 1950.

The grant will aid also in carrying on studies of nutritional deficiencies relating to tumor or cancer growth. Such a study is of extreme importance in finding out more about the cause and cure of cancer.

This is



FEBRUARY
1950
Vol. 3 No. 2

YOUR MEDICAL ASSOCIATION

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

American Ob and Gyn Board Retells Rules --- Halts Rumor

RESIDENCY TRAINING REQUIREMENTS

The American Board of Obstetrics and Gynecology has not made nor is it contemplating any changes in its residency training requirements, despite rumors of an increase in training years. Eligibility requirements remain the same, namely, three years of acceptable formal training, followed by at least two years of post-training practice in the specialty.

Hospitals are inspected and approved for training jointly by the Council on Medical Education and Hospitals of the American Medical Association and this Board. Approvals are granted for training periods of one, two and three years depending on the available facilities and the findings of the survey inspections.

This Board has no objection to residency services being arranged by hospitals for periods longer than three years, unless this dilutes the candidate's clinical training opportunities too much during the first three years. However, the Board does not accept a fourth year, or more,

of residency training as a substitute for any part of the required two years of post-training practice.

The importance of post-training practice in the specialty is emphasized as an opportunity for maturing of the candidate and for colleague appraisal of a man's ability when working on his own responsibility in his chosen community. The only exception to this ruling is in the case of men advancing from their training into full-time teaching positions. These men then must complete at least two years in such positions.

Copies of the Bulletin of this Board, outlining the above requirements in more detail, are available to hospital administrators or to candidates, upon application.

Paul Titus, M.D., Secretary, American Board of Obstetrics and Gynecology, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

SEVENTH DISTRICT ELECTS McDONALD

The annual business meeting of the Sioux Falls Seventh District Medical Society was held Tuesday Eve-

ning December 6. According to the By-Laws of the district society this designated the meeting which was devoted to medical economics. The speaker of the evening was **Jerry Maher**, States Attorney for Minnehaha County. His topic had to do with medico-legal problems, and medical testimony.

The following officers were elected for the year: President — **Dr. C. J. McDonald**; Vice President — **Dr. Donald H. Breit**; Secretary — **Dr. Don H. Manning**; and Treasurer — **Dr. Paul C. Reagan**. Board of Directors term expires 1952 — **Dr. L. J. Pankow**; Board of Censors term expires 1952 — **Dr. H. B. Shreves**; Delegates to State Medical Association — **Drs. John Kittleson, George Stevens, Don H. Manning and C. J. McDonald**. Alternates to State Medical Association are; **Dr. J. A. Nelson, J. Y. Clarke, H. B. Shreves, H. M. Dehli, C. D. Green and F. C. Kohlmeier**.

NEWS NOTES

Dr. M. A. Hetrick, Pierre, South Dakota, has been granted a fellowship with the Mayo clinic in Rochester, Minnesota, and will pursue further study in the field of obstetrics and gynecology. He graduated in 1942 from

LIBRARY OF THE
COLLEGE OF PHYSICIANS

Jefferson medical college in Philadelphia, served in the Air Force medical department during the war, and located in Pierre in 1946.

Dr. Abner Willen has moved from **Clear Lake** where he has practiced for the past two years and has returned to **Clark** where he was previously located.

Dr. John Bartness has recently located in **Bowdle**. Dr. Bartness is a graduate of Marquette, 1946 and interned at St. Mary's in Duluth.

The **State Hospital Association** will hold its Annual Meeting in **Huron** Oct. 1, 2 and 3.

Dr. Charles E. Baker has located at **Belle Fourche, S. D.** Prior to his arrival in South Dakota he practised in Fergus Falls, Minnesota. He will enter general practice.

All members of the South Dakota State Medical Association who plan to attend the A.M.A. convention in June are urged to notify the executive office in Sioux Falls. A post card will be sufficient.

In the cross index section for 1949 in the January Journal 1950 we neglected to list the article "Meckels' Diverticulum" by Drs. E. J. and V. J. McGreevy, of Sioux Falls.

DISTRICT MEDICAL SOCIETIES ELECT OFFICERS

Huron District

H. P. Adams, M.D.

—President

T. A. Hohm, M.D.

—Vice-President

F. D. Leigh, M.D.

—Secretary-Treasurer

Paul Tschetter, M.D.

—Delegate

F. D. Leigh, M.D.

—Alternate

Watertown District

Mary Schmidt, M.D.

—President

G. R. Barton, M.D.

—Vice-President

Donald Fedt, M.D.

—Secretary-Treasurer

R. Stoltz, M.D.

—Councillor

T. Ruel, M.D.

—Delegate

Pierre District

L. C. Askwig, M.D.

—President

I. R. Salladay, M.D.

—Vice-President

M. M. Morrissey, M.D.

—Secretary-Treasurer

M. M. Morrissey, M.D.

—Councillor

T. F. Riggs, M.D.

—Alternate delegate

Aberdeen District

John Rodine, M.D.

—President

Paul R. Scallin, M.D.

—Vice-President

C. L. Voge, M.D.

—Secretary-Treasurer

John Rodine, M.D.

—Delegate

Paul R. Scallin, M.D.

—Delegate

C. L. Voge, M.D.

—Alternate delegate

Carson Murdy, M.D.

—Alternate delegate

Paul Bunker, M.D.

—Board of Censors

J. E. Bruner, M.D.

—Board of Censors

Paul R. Scallin, M.D.

—Board of Censors

Rosebud District

R. E. Morgan, M.D.

—President

J. E. Studdenberg, M.D.

—Secretary-Treasurer

R. J. Quinn, M.D.

—Councillor

RURAL CONFERENCE IN K. C. AIRS HEALTH NEEDS

The 5th Annual National Conference on Rural Health was held in Kansas City, February 3-4. Representing the South Dakota State Medical Association were **Dr. A. P. Peeke**, chairman of the Rural Health Committee and **John C. Foster**, Association executive-secretary.

The theme of the Conference was "Let's Do Something About It," and brought together representatives of all groups interested in rural health.

Dr. F. S. Crockett was chairman of the conference and introduced leaders in the field of rural health such as: **Paul Johnson**, Editor of the *Prairie Farmer*, **Dr. L. W. Jones**, President of the University of Arkansas, **John Brandt**, President of the National Milk Producers Ass'n, **Dr. J. P. Sanders**, Vice-President of the American Academy of General Practice and **Dr. Frank Murphy**, Dean of University of Kansas School of Medicine.

Numerous groups discussions were held Friday afternoon on subjects ranging from "Federal Aid to Rural Areas for Health Purposes," to "Methods of Continuing Education of Physician." The evening program consisted of a panel discussion on "How to Get Medical Care to Rural People."

The Saturday morning program consisted of reports

from the group chairmen and a final summation by **Dr. Roger Corbett**, Agricultural Counsel, National Association of Food Chains. The meeting closed with a noon luncheon at the President Hotel.

All other meetings were held at the City Auditorium.

Dr. Peeke also attended a conference of Committee Chairmen at the President on February 2nd.

POSTGRADUATE ASSEMBLY IN ENDOCRINOLOGY INCLUDING DIABETES TO BE HELD APRIL 3-8, 1950

The Roney Plaza, Miami Beach, Florida offers special convention rates to members of this assembly, and reservations should be made directly with the hotel.

The faculty will consist of 20 prominent researchers and clinicians in the field of endocrinology and metabolic disorders, gathered from the United States and Canada. The course will be a practical one of interest and value to the specialist and those in general practice. The program will consist of lectures, clinics and demonstrations. Ample time will be given to questions and answers at the end of each session, and registrants are encouraged to contact members of the faculty for individual discussions.

A fee of \$75.00 will be charged for the entire course and the attendance will be limited to 100. Registration will be in the order of checks received and will close on March 3, 1950. Should there be an insufficient number of applicants to fill the course,

the registration fee will be refunded immediately in its full amount. Please forward application on your letterhead together with check payable to The Association for the Study of Internal Secretions, to Henry H. Turner, M.D., Secretary-Treasurer, 1200 North Walker Street, Oklahoma City 3, Oklahoma, before March 3, 1950. Further information and program will be furnished upon request.

MENTAL HEALTH GROUP MEETS IN MITCHELL

The executive committee of the South Dakota Mental Health association met at 4 p.m., December 9, in the office of **Glen Bachman**, head of the psychology department of Dakota Wesleyan university.

On the executive committee are the **Rev. Edward G. Antrim**, Pierre; **Bachman**, **K. J. Campbell**, Sioux Falls; **Dorothy L. Craig**, Pierre; **R. D. Green**, Sioux Falls; **H. W. Hogan**, Redfield; **George Phiifer**, Mitchell; **E. S. Watson**, Brookings, and **Faith M. Goble**, Brookings.

Members of the medical association committee are Dr. **E. M. Stansbury**, Vermillion; **Dr. F. D. Gillis**, Sr., Mitchell; **Dr. V. V. Volin**, Sioux Falls; **Dr. R. J. Quinn**, Burke, and **John C. Foster**, Sioux Falls.

MICHIGAN POSTGRADUATE DATES SET

The Michigan Postgraduate Clinical Institute will meet March 8, 9, 10, 11, 1950 in Detroit.

The conference will consist of series of speeches on various topics by prominent physicians. March 11th is to be designated Annual Heart Day.

Send application directly to **E. C. Texter**, M.D., Chairman of the Institute Committee on Hotels, 1005 Stroh Bldg., Detroit 26, Michigan.

PRIZE ESSAY AWARD

The Board of Regents of the American College of Chest Physicians offers a cash prize award of two hundred and fifty dollars (\$250.00) to be given annually for the best original contribution, preferably by a young investigator, on any phase relating to chest disease.

The first award will be made at the forthcoming annual meeting of the College to be held in San Francisco, June 22-25, 1950.

The following conditions must be observed:

(1) Five copies of the manuscript, typewritten in English, should be submitted to the office of the American College of Chest Physicians not later than May 1st, 1950.

(2) The only means of identification of the author or authors shall be a motto or other device on the title page and a sealed envelope, bearing the same motto on the outside, enclosing the name of the author or authors.

Additional information may be obtained from the Executive Secretary of the College, 500 North Dearborn Street, Chicago 10, Illinois.

PHARMACEUTICAL DIVISION

BLISS C. WILSON, Editor

MODERN THERAPEUTIC AGENTS

by Edgar Parry, Instructor in Pharmacy
South Dakota State College

Cortisone and ACTH in Arthritis No. 2

The early series of conjectures and theories which led to the use of Cortisone in rheumatoid arthritis and establishment of a relationship between arthritis and the adrenal cortex were discussed in the last issue of this Journal. Case histories and their results showing Cortisone to be of benefit in Arthritis were presented. A discussion of the modern theory of the pharmacology of the drug and its relation to ACTH must follow.

Adrenal cortical hormones are considered to be numerous. They are all closely related steroids with a chemical nucleus similar to that of Vitamins A and D, Cholesterol, the sex hormones and cardiac glucosides. The cortical hormones include, besides sex hormones, a number of metabolic hormones such as Corticosterone, desoxycorticosterone, Cortisone, Compound F and others. This particular group is known as the glycogenic type steroid since they are primarily concerned with carbohydrate and glycogen metabolism. They are characterized by having an oxygen attachment of some kind at the eleventh carbon. They also share along with other cortical hormones in the control of other processes such as regulation of water and electrolyte balance (and in so doing regulate blood pressure), and body resistance to fatigue, intoxication, cold, and starvation.

In evaluating Cortisone therapy in rheumatoid arthritis, it is important first of all to realize that contrary to early thought, there is no deficiency in the adrenal cortex in arthritis, nor are we replacing a hormone when Cortisone is given. It is more a supplemental therapy. This is evident when we consider that the arthritic is not an Addisonian. The two have some symptoms in common, but very seldom does a patient with hypoadrenalism suffer from rheumatoid arthritis.

During administration, Cortisone brings a sharp remission of symptoms in the arthritic patient, but relapse occurs when therapy is stopped. This indicates the action of Cortisone is largely pharmacological, but in a few cases the effects of the drug are residual and changes in these cases must be accounted for physiologically. Any explanation of these changes, however, is purely hypothetical since so little is known of the fate and physiology of the adrenal gland hormones.

We know that the physiological effect of Cortisone will be that of the glycogenic group of cortical steroids — a decreased eosinophil and lymphocyte count, an increased total white count, and a rise in blood sugar. These have no bearing on rheumatoid arthritis. The side effects constitute a typical Cushings Syndrome¹, fat deposition on face, neck, and trunk, atrophy of gonads, hirsutism, glycosuria, etc., possibly due to an increased basophil count in the pituitary.

Beyond these known physiological effects, there is only conjecture. It has been noted that not only rheumatoid arthritis, but rheumatic fever, psoriasis, and lupus erythematosus have responded to Cortisone therapy. These various disorders are related in that they are disorders of the connective tissue and have been called the "collagen diseases."¹ Physiological change, then, may be related to changes in cellular matrix of connective tissue.

It is interesting to note that should other steroids, such as the intermediates among the sex hormones which are otherwise inactive, be given in large doses as cortisone, they produce a temporary symptomatic improvement in arthritis. Testosterone propionate and estradiol benzoate for example bring remission of symptoms in arthritis.² They are believed to be altered in the body to some other substance since methyl testosterone, a substance unaltered in the body, produces no beneficial effect. It should be emphasized

also that the effects are not specific, but simply due to the metabolic activity of non-specific steroids. The benefit attained however is not in the same high proportion of cases, nor do any of these steroids reduce the sedimentation rate like Cortisone.

At present, no one is willing to state a theory to explain the action of steroids in arthritis. One concept notes the abnormalities of hyaluronic acid concentration in joint fluid of arthritic patients, presumably brought about by a change in activity of hyaluronidase. It is pointed out that hyaluronic acid is a polysaccharide with a basic structure very similar to that of glycogen.¹ If we assume that the enzymes responsible for production of glycogen play some part in the production of hyaluronic acid, and these enzymes contain or depend on the glycogenic adrenal steroids for their working groupings, then we can assume that the glycogenic adrenal steroids, through production of hyaluronic acid, are the key to the collagen diseases. This concept, though plausible, has no experimental proof. We must admit that at present, no one knows how cortisone acts to rid the patient of arthritis.

ACTH is the adrenocorticotrophic hormone found in anterior pituitary extracts which is capable of stimulating the adrenal cortex in the production of steroid compounds. Its discovery gives us two methods of combatting arthritis. Replacement therapy may be used in which cortisone is given, or stimulative therapy in which ACTH is given to stimulate the adrenals in production of cortisone. It is fortunate the adrenal glands remain healthy in arthritis, or no stimulative therapy would be possible.

Since ACTH stimulates production of all adrenal steroids, it has the same effect as Cortisone on the arthritic patient, but has additional action also. A report from a conference of research workers of the U. S. and Canada held under the auspices of Armour and Company to report on progress with ACTH shows many different possibilities for this hormone.³ Doctors from John Hopkins University, Northwestern University Hospital, and Royal Victoria Hospital at McGill University, reported on tests conducted for asthma and allergic disturbances. They found that patients with severe asthma had normal

breathing restored within twelve to thirty-six hours, and with some, relief lasted two and three weeks. In hay fever, results are more striking than with any known antihistamine. In some cases, an injection of 25 mg. every six hours for eight injections stopped hay fever for the remainder of the season. Eczema is cleared up after two or three days treatment, and psoriasis disappears as early as forty eight hours after treatment is begun.

Doctors at the Harvard Medical School reported on its use in juvenile rheumatoid arthritis and rheumatic fever. They found that while ACTH therapy must be continuous in adult patients, the arthritis was stopped and no recurrences developed after ACTH was discontinued in juvenile patients. This should signify the value of early treatment. They reported five "fully cured" patients from a total of eleven cases. Five others were relieved of all symptoms, but showed laboratory signs of the disease. One was helped, but relief was not definite. The most amazing response, however, was shown in two cases of aortic regurgitation, a severe heart valve disorder that usually persists through life. In both cases the condition was completely cleared up with ACTH.

It may prove beneficial in treating mental disorders. Doctors Hoefer and Glaser of the Neuropsychiatric Institute of Columbia University reported it did effect the brain wave pattern of mentally ill patients. It may prove dangerous because of this however — one patient developed a maniac condition and needed electric shock treatment to correct it.

Evidence was also presented that one parenteral infection of 20 mg. brought remission of all symptoms in gout.² Thereafter recurrences were prevented with colchicine. It may prove beneficial in myasthenia gravis also.

The side reactions are thought to be temporary and will possibly be entirely avoided when more is known about proper dosage and time intervals. Common side effects are those of cortisone and include besides Cushings syndrome, a sense of exhaustion, heaviness in the chest, and a moderate blood pressure elevation (thought by some to be due to bits of posterior pituitary present with the hormone).

As with Cortisone, research is tremendously slow due to scarcity of the drug. It is

extracted from the pituitary glands of hogs at present. It takes 1,200 hogs to make one pound of pituitary gland from which one and one-third grams of ACTH are obtained. This means 900 hogs produce one gram at ACTH or 400,000 hogs yield one pound. In doses of 100 mg., one can easily see how large the problem is for overcoming the scarcity.

REFERENCES

1. Upjohn Medical Dept.; Cortisone in Rheumatoid Arthritis, Articles Number 28 and 29 in a series.
2. American Professional Pharmacist 15: 1010-1012 November 1949. Therapy with Steroid Compounds.
3. Drugs and Cosmetic Industry 65: 510-511, November 1949. ACTH Clinical Report.



Dining and dancing (above and right) featured the first annual post holiday party given by Rapid City pharmacists for doctors and dentists of the city. Above, left to right, are Dr. M. P. Merryman, Mrs. Ray Lemley, Dr. F. R. Williams and Mrs. Williams.

RAPID CITY PHARMACISTS ENTERTAIN PHYSICIANS AND DENTISTS

The Rapid City Pharmaceutical Society gave a post holiday party for the physicians and dentists of the city on January 17th 1950. Approximately 125 doctors, dentists and pharmacists and their wives attended this dinner-dance affair in the ballroom of the Alex Johnson Hotel on the third Tuesday of the new year.

So well attended and successful was this first event that pharmacists have expressed their intention of giving a similar courtesy each year. The party received extremely favorable comment from attending physicians and dentists. This social affair created a lot of good will towards the pharmacists of Rapid City. It was a "breaking down" of the stiff, professional routines into friendly, social acquaintances.

Dancing started in the ballroom at 8 p. m. to the music of Louis Bishop and his band, and a buffet supper was served at 10 o'clock. Dancing was resumed after supper and lasted until midnight.

Welles EerNisse was chairman for the affair and officers of the Rapid City Pharmaceutical Society are Maurice Francis, president; Leon Hobart, vice-president; M. C. Beckers, secretary and Esther Mallory, treasurer.

The Rapid City Journal carried a full page of pictures of this first annual dinner-dance in their first Sunday edition following this affair.

NEWS ITEMS

Mitchell T. Otterberg took possession of the drug store in McLaughlin, S. Dak. on January 9th. The name of the pharmacy has been changed to "Rexall Drug & Jewelry." Mr. Otterberg graduated from the School of Pharmacy, N.D.A.C., Fargo, North Dakota in 1943. He reciprocated to South Dakota in 1947 while employed by Swartz, Inc., Mobridge and continued in this position until he purchased a store of his own last month.

William W. Holliday replaced **Lawrence J. Jackson** as Pharmacist Manager of the Brown Drug Store in Watertown on January 10, 1950. Mr. Holliday was formerly pharmacist manager of the Walgreen Drug Store, Sioux Falls which position he resigned about three weeks earlier. Immediately following the transfer, Mr. Jackson was interested in openings for pharmacists in our state.

The Secretary's office enjoyed a short visit with **Joe Miltenberger** on his last trip to Pierre. As the South Dakota representative for "NYAL" since "horse and buggy days," Joe recalled some of the early conventions of our association and mentioned "group pictures" which he might exhibit at the S. D. Ph. A. convention in Sioux Falls next June. The "Nyal Ambassador" has always been an ardent worker with the Allied Drug Travelers and I am sure the older pharmacists will appreciate his exhibit if he decides to make one.

Deane V. Hockett, former owner of the Philip Pharmacy, will continue his residence in Philip until after High School graduation next spring. In the mean time he will be available for relief work as a pharmacist. Write him, if interested.

Kermit Lange writes from Pasadena that he attended the Rose Bowl Game and had a wonderful time ringing his "S.D.S.C. cowbell" for Ohio State. He plans to take the California Board of Pharmacy examinations for licensure in February. Mr. Lange sold his pharmacy in Sioux Falls last October.

Odin Thompson has bought out the interests of his former partner, **Mr. R. R. Saul**, in the Saul & Thompson Pharmacy at Faith, South Dakota according to informants who have visited our office. We understand that Mr. Saul will take a vacation in Florida.

George Bartholomew has purchased the Lemmon Drug Company, Lemmon, S. Dak. from Mrs. E. Faye Teskey. Mr. Bartholomew has been pharmacist manager of the Lemmon Drug Company for several years and we were pleased to learn that he has bought out his former employer.

Ray Andrews has informed the Board of Pharmacy that the drug store which he has been managing for **Mrs. Ceil France** in Canistota has been sold to **Mrs. A. E. Kosthboth** of Canistota. The name of the pharmacy has been changed from "France Drug" to "City Drug Store" and Mr. Andrews will continue as Pharmacist Manager for the new owner.

Walter McCurdy arrived home from his vacation trip to the west coast on January 11th. Inspection of non-pharmacy retail outlets for violations of the Pharmacy Law have already been resumed according to the latest word received from him.

Pharmacist **Fred E. Briggs** reached his 86 birthday on the seventeenth of January. Although he retired as Inspector for the Board of Pharmacy a few years ago he still enjoys calling on the drug trade and supplying their needs for labels, boxes and sundry merchandise.

Alvin E. Olson of Claremont writes that he has decided to close his drug store there on or about February 1st. The city of Claremont voted in favor of a municipal liquor store and being deprived of an off-sale license Olson says he would find it difficult to continue in business because they do not have a doctor there.

Vere E. Farrar, former proprietor of the Woodward Pharmacy in Aberdeen, writes that he was successful in passing the California Board of Pharmacy examinations in

October and that he and his son-in-law **Wallace LaVine** are enjoying a good business as proprietors of the "Mixville Pharmacy" located at 2430 Glendale Blvd., Los Angeles.

Ernest R. Watland, former pharmacist manager of the Walgreen Store in Sioux Falls writes from Cuyahoga Falls, Ohio that he is ready to come back to South Dakota after nearly a year's absence. Mr. Watland is interested in a good pharmacy where he can buy a portion or all of the business.

Make your plans early to attend the S. D. Ph. A. annual convention in Sioux Falls, on June 13, 14, 15, 1950. Headquarters will be in the Cataract Hotel. **Governor** and **Mrs. Mickelson** will be guests at our convention banquet and **C. L. (Roy) Doherty**, Public Utilities Commissioner and pharmacist, will be the toastmaster for the banquet program.

Frank W. Moudry, President of the National Association of Retail Druggists, has accepted an invitation to appear on our S. D. Ph.A. convention program in Sioux Falls, next June. Mr. Moudry who operates a professional retail pharmacy in St. Paul, has rendered invaluable service to the pharmacists of his state as Secretary of the Minnesota State Board of Pharmacy. He has been Chairman of the Executive Committee of the N.A.R.D. and is a past-president of the National Association of Board of Pharmacy. Be sure to hear Mr. Moudry at our convention.

Mrs. Joe Gurtel has been selected as Chairman of the Sioux Falls Local Ladies' Auxiliary. She will be in charge of entertainment and programs for pharmacist's wives who attend the convention on June 13, 14, 15, 1950.

Mrs. Lloyd E. Wagner, Marion, President of the Ladies' Auxiliary of S. D. Ph.A., has expressed some new ideas for improving the auxiliary and for having a larger number of pharmacists' wives attend our annual conventions.

PHARMACEUTICAL INSTITUTE BROOKINGS — APRIL 3, 4, 5, 1950

Dr. Floyd J. LeBlanc, Dean, Division of Pharmacy has announced that a Refresher Course for South Dakota Pharmacists will be held at the State College Union Building on Monday, Tuesday and Wednesday, April 3, 4, and 5, 1950.

(Continued on Page 62)

AUXILIARY ACTIVITIES

Dear Auxiliary Members:

At this time of year, most Auxiliaries are installing new Officers for the year 1950-51, and members dues have been forwarded to our State Secretary-Treasurer, Mrs. M. R. Gelber, Aberdeen, South Dakota. It is my earnest hope that we will have a definite increase in our membership. Let us try to make all Doctors' wives in this State realize that participating in Auxiliary activity is the best means of uniting us, for "in unity there is strength."

I have had the pleasure during the Christmas Holidays of having an interesting and worthwhile talk with Senator Karl Mundt which makes one realize our fight is in its first steps and we should not for one moment relax our efforts against every form of Socialism.

The A.M.A. feels the need of the help of the Auxiliary. Let us be good active members and help save the American Democracy.

Activities are well under way in our State. The Seventh District Medical Auxiliary is sponsoring a Health Education Program in Sioux Falls in February which we believe will be very interesting. A new idea for our Auxiliary programs.

District No. 3, Madison, and District No. 2, Watertown, have certainly outlined a busy and interesting year for themselves. I would welcome news from the other Districts too.

Your President is also busy. She will visit District 6, Mitchell, February 6th, at their regular monthly meeting, to help formulate plans for the State Convention, May 21st thru May 23rd. Mark these dates on your calendar now and meet old friends and new in Mitchell.

COULD THIS BE WORKED OUT IN YOUR DISTRICT?

Plan for some method of making it easy for hospital patients to write letters opposing compulsory health insurance?

PLEASE

County Officers and Chairmen,
We try to give you ideas and
We try to send you messages and

We stay awake nights thinking up
Stuff we hope will strike a
Responsive note. We burn the
Midnight oil reading and condensing
Material you could use and
Send each article out with a
Prayer that there is at least one
Item of value to every person, but
Unless you read each copy with the
Idea of applying it to yourself or
Your organization, we can't help
You, BUT WE STILL TRY.

Dorothy L. Sercl, President Woman's
Auxiliary to The South Dakota State Medical Association.

(Continued from Page 61)

The program which is now being formulated will be similar in scope and interest to the refresher courses offered during the past two years. It will give an opportunity for practicing pharmacists to learn about newer pharmaceutical products and how they are used in the treatment of disease. The faculty from the Veterinary Department at State College have participated in these programs giving valuable information to our pharmacists in rural communities regarding the latest methods for the control and treatment of diseases of poultry and livestock. Dean LeBlanc has announced that an addition to this year's program will be a round table discussion on Fair-Trade to be headed by Pharmacist J. C. Shirley of Brookings. The newly created Bureau of Education on Fair Trade have assembled valuable information to offset arguments for the repeal of Fair Trade Laws and this information will be available for the discussion.

A registration fee of \$5.00 will be charged to pharmacists who enroll for this refresher course. The fee includes a dinner-banquet and entertainment on the second evening of the institute. Pharmacists attending should make their own reservations for sleeping rooms if they plan to stay in Brookings over night.

Recurrent Gallstone Ileus

J. V. McGreevy, M.D., F.A.C.S.

E. J. McGreevy, M.D.

Sioux Falls, South Dakota

Although gallstones represent the least common of the ordinarily considered causes of intestinal obstruction, the general surgeon is faced with this condition at least once or twice during his lifetime. The seriousness of the situation is reflected by its mortality which lies between fifty and seventy percent. These facts make it seem worth while to review the subject briefly and report a case, which affords at least one successful answer to a few of the many problems involved.

It has been estimated that this condition causes one to four percent of the fatal cases of acute obstruction. Martin¹, from a questionnaire sent to a number of American surgeons, indicated that, among approximately one-half million operations, there were but sixteen cases of intestinal obstruction due to stones, or one among 30,000 operations.

The relative ratio of Cholelithidosis incidence in the female and male is generally given as five or six to one. It is natural to expect that the ration should be essentially the same in gallstone ileus.

Most Writers agree that the majority of stones pass by way of a fistula between the gall bladder and duodenum. However, fistulae are reported² as having been found connecting the gall bladder and stomach, the jejunum, the ileum, the colon, and even the urinary bladder.

The following case is rare because the patient, a sixty-three year old woman, suffered from two episodes of acute intestinal obstruction within a fourteen day period. In 1929, Holz³ listed but five cases in which gallstone obstruction had occurred in the same individual more than once. Two cases of double obstruction, the recurrence coming within several days after operation, were also reported by Downes⁴ and by Pylus⁵. In 1938, Schwarke⁶ added another case as did Hinchey⁷ in 1939. The present case is the tenth to be reported.

Case Report

Mrs. A. E. McKennan Hospital No. 90137

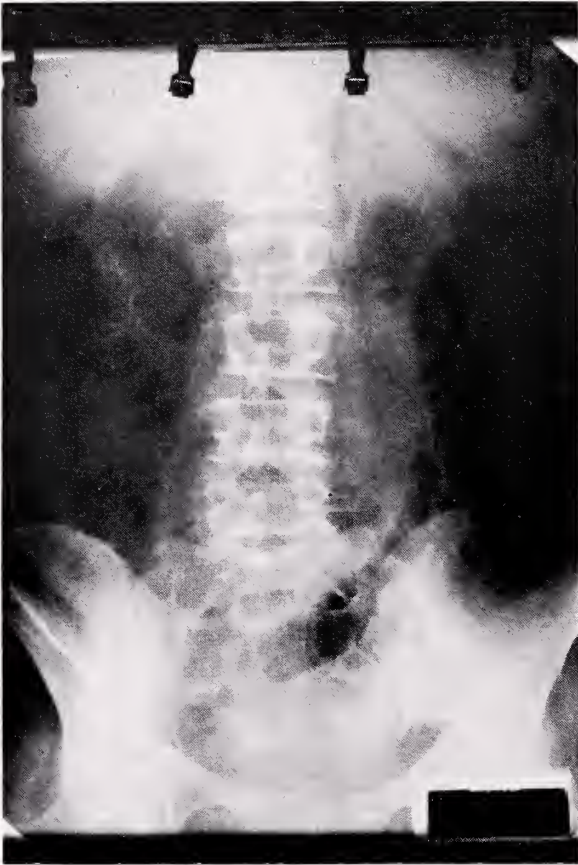
This is a 63 year old white female who entered the hospital on September 10, 1949, with a history of cramp abdominal pain for six days. The pain which started from the epigastrium and shifted to the right upper quadrant was associated with considerable amount of nausea and vomiting.

Examination revealed a well developed but very dehydrated and ill appearing elderly female. The abdomen was moderately distended with tenderness and muscular spasm in the epigastric region and right upper quadrant. A soft bulging mass the size of a lemon which possessed slight tenderness was found in the mid-line above the umbilicus. The white blood cell count was 14,350, the temperature was 98.8, the pulse was 94, the bowel sounds were normal, and the respirations were 22.

Operation was postponed until some intravenous fluids could be given so as to better prepare her for a cholecystectomy.

On September 11, 1949, the mass directly above the umbilicus could not be reduced and auscultation of the abdomen revealed typical obstructive rush and tinkle. Flat plate of the abdomen showed a considerable amount of gas in the small bowel — none in the colon — and a large calculus in the gall bladder.

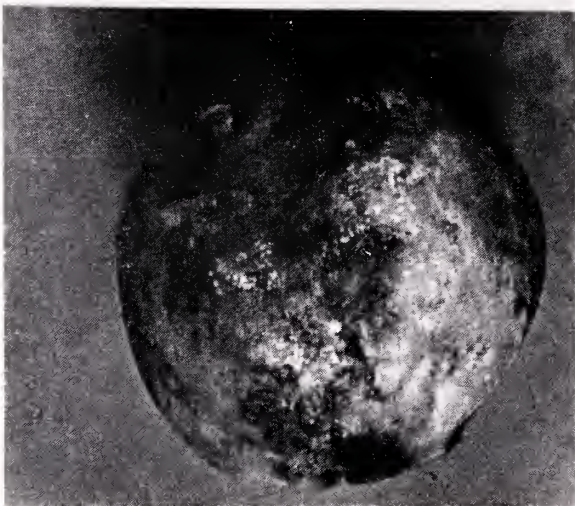
On September 12, 1949, the patient was submitted to surgery under sodium pentathal anaesthetic. The abdomen was opened through a transverse illiptical incision which encircled the hernia. The sac when opened was found to contain collapsed transverse colon and omentum. The small bowel was found to be distended approximately three times normal size. Exploration revealed a large impacted stone in the lower ileum which was producing the obstruction. The gall bladder contained one very large calculus. The small bowel containing the im-



McKenna Hospital

49-P-1305

4 3 2 1 METR



pacted stone was delivered into the wound, walled off with warm packs, and the bowel opened directly over the lesion removing the large calculus. The bowel was then closed transversely using a layer of interrupted silk. The peritoneum was closed with continuous suture of chromic double ought catgut, fascia with interrupted wire, skin with interrupted black silk.

Patient was placed on penicillen, dihydros-treptomycin, negative pressure and appropriate supportive intravenous feedings. Three days after surgery she had her first stool and the Wangansteen tube was removed. By September 19, 1949, seven days post operative, she was up and about at will and ready for discharge.

On September 20, 1949, the patient vomited her breakfast and complained of intermittent cramp like pains in the lower abdomen. Negative pressure was restarted and a second flat plate of the abdomen showed considerable gas in the small bowel — none in the colon — tube in the stomach. Diagnosis is small bowel obstruction.

The following day the abdomen was moderately distended but there was no rebound tenderness. Peristalsis was present but sluggish.

By September 23, 1949, no pain was present — she passed a good amount of gas — peristalsis was normal — Wangansteen tube clamped off for twelve hour intervals without distress, so laporotomy was postponed. X-Ray of this date showed small amount of gas



in the colon — gas in small bowel appears slightly less — calculus remains essentially unchanged in position.

The evening of September 25, 1949, the cramps returned and were associated with nausea and vomiting. Peristalsis increased in its pitch.

On September 26, 1949, the patient was re-submitted to surgery for small bowel obstruction. The Abdomen was opened through a large right rectus muscle splitting incision. The bowel was examined and there were many adhesions but they were not the cause of the obstruction. In separating the bowel from the previous scar, a hole was inadvertently made in the bowel. On further examination a second gall stone about one half the size of the first was found in the lower jejunum. This was milked out of the already open bowel. About four inches higher up in the jejunum was found the cause of the obstruction — a large gall stone the size of a golf ball. The bowel was incised in a longitudinal direction, stone removed, and closed transversely as already described. The hole made by accident was closed in a similar manner. The gall bladder was again palpated and found to contain no stones. The abdomen was closed as already described with a Penrose drain in the pelvic gutter.

By September 28, 1949 — two days post surgical — the patient was placed in an oxygen tent. Both temperature and pulse were around one hundred. Blood transfusion



LIBRARY OF THE
COLLEGE OF PHYSICIANS
OF PHILADELPHIA

was begun. Prognosis is very poor.

Four days post surgical — September 30, 1949 — the patient began to improve. Peristalsis was returning and she passed gas per rectum.

On October 5, 1949, a fistula became apparent at the junction of the two wounds. The drainage is bile colored. The patient continues to eat well and have a daily bowel movement.

On October 7, 1949, a second fistula was in evidence at the lower pole of the right rectus incision. By the 12th, the first fistula was the size of a silver dollar and the second the size of a quarter. Patient is going down hill despite daily intervenous feeding and repeated blood transfusions in an effort to maintain electroletic and protein balance.

The skin by October 15, 1949, is rapidly being digested by the small bowel and pancreatic juices leaking from the fistulae. The skin immediately surrounding the fistulae are very red and sore looking. A paste made of yeast was applied to the skin to cut down on its disentergration.

The skin now — October 20, 1949 — appears remarkable healthy; it is no longer being dissolved. The drainage has noticeably slackened. The yeast paste was now changed to Zymenol, which contains fifty percent brewers yeast, as it was less offensive to smell and apparently just as effective.

By November 7, 1949, the patient had regained enough strength to sit up on the side of the bed for one hour daily.

Since November 18, 1949, she has been getting up in a chair once daily. Dressings are now changed only once daily instead of four to six times per day as was the case a month ago.

By Thanksgiving Day the patient was able to walk about the room — used a "walker" as she was still rather weak.

Patient was discharged from the hospital on December 13, 1949 — just three months and three days since admission. The patient has lost approximately forty pounds during her illness. The fistula has almost entirely closed — dressings being changed every three to five days.

Post surgical check-up on January 15, 1950 revealed the fistula to be closed and patient has regained fifteen pounds in the last month.

SUMMARY AND CONCLUSIONS

1. A case report of recurrent gallstone ileus has been presented.
2. Gallstone ileus occurs typically in elderly women with a previous history of chronic gall bladder disease.
3. The high mortality, 50 — 70 per cent, is chiefly the result of the advanced age of the patients and delay in operating on them. This delay is largely due to the variable, somewhat atypical obstructive symptoms. Obstruction from this cause differs from the usual type of obstruction of the small bowel in that it is often intermittent in character, and that patients may pass gas or even faeces during the quiescent periods of an attack. This was evidenced in our delay in performing the second operation once obstructive symptoms began to reappear.
4. Early diagnosis and operation is imperative in this, as in any, type of obstruction. Do not wait until vomiting becomes fecal before making a diagnosis of obstruction because as Handley⁸ has aptly said, "Is not a sign of intestinal obstruction, but rather a herald of approaching death."
5. X-Ray films should be made, as they may be very important diagnostic aids.
6. The remarkable quality which yeast paste or zymenol paste possesses that stops the disentergration of skin about a small bowel fistula is reason enough for the publication of this paper.

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PHOTOGRAPHY

Sister Mary Scholastica, P.B.V.M.

ANNUAL MEETING

MITCHELL

MAY 21, 22, 23

Radiologic Treatment of Malignant Lesions of the Bladder, Prostate, Kidneys and Testicles*

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Malignant Lesions of the Urinary Bladder

While leiomyosarcomas and rhabdomyosarcomas of the bladder occur mostly in infants and usually are best treated surgically, our main interest in this study is in the more common carcinomas. Of 902 epithelial tumors in the Carcinoma Registry of the American Urological Association, 76 per cent were in men and 24 per cent occurred in women, a ratio of 3:1. The age span for most patients having these tumors is from 50 through 59 years.

The initial symptoms in the 902 patients mentioned above, in diminishing order of frequency, were hematuria, frequency, dysuria, pain unrelated to urination, difficulty in urination, and acute retention.

Cancer of the bladder has been regarded as an occupational disease, with coal tar products and to a lesser extent the aniline dyes as chief offenders. Leukoplakia of the bladder, arising from mechanical irritation or chronic inflammation, seems to be a precursor, as well as some parasitic infestations, such as bilharziasis.

The diagnosis of cancer of the bladder entails very careful examinations. Cystoscopic examination is essential, and material for biopsy should be obtained through the cystroscope. Cystrography with opaque materials and pneumocystograms are helpful. Pyleograms are useful to study the status of the kidneys. Tuberculosis of the bladder must be differentiated, as well as invasion of the bladder by cancers of the prostate, cervix and rectum.

Most cancers of the urinary bladder are transitional-cell epitheliomas, arising from papillomas. Papillomas are definitely pre-malignant, and are diagnosed by some pathologists as carcinomas, grade 1 (Broders' method). Papillomas are often multiple, some malignant and some benign. Papillary masses of cancer develop later. A small number of cancers are diagnosed under the microscope

as epidermoid carcinomas; these are firm and deeply ulcerated lesions. Most of the single cancers arise on the lateral walls; the next common site is the trigone.¹ The Carcinoma Registry reported a series of 643 single cancers of the bladder, and 250 multiple carcinomas of the bladder.

The metastatic spread of cancers of the bladder is by the external iliac nodes, and occasionally by the hypogastric and common iliac nodes. Infiltrating lesions tend to spread to the retroperitoneal lymph nodes and thence to liver, lungs and bones.

The treatment of carcinomas of the bladder is radiologic and surgical. The interstitial use of radium has many advocates among urologists and radiologists. Barringer² has been a pioneer in treating cancers through a cystoscope, lesions that can be entirely visualized through this instrument. Glass radon seeds were used in the early years; gold radon seeds, in use since about 1924, have averted the caustic effects of the beta rays. The tumor must be carefully examined through the cystoscope and the dimensions must be plotted to ascertain the volume of diseased tissue. At the Memorial Hospital³ ten to fifteen threshold erythema doses are believed necessary to destroy a tumor, using 2 mc. seeds 1.5 cm. apart, or 1 mc. seeds 1 cm. apart. Seeds are implanted in the entire tumor and base of the tumor and in addition seeds are buried 1 cm. beyond the apparent edge of the tumor. Many cancers of the bladder are treated in this manner at the Mayo Clinic, through the cystoscope, using 1 mc. gold seeds to every cubic centimeter of malignant tissue. To control hemorrhage during the implantation, epinephrine is added to the irrigating solution. In larger cancers, and in flat, infiltrating lesions, radon seeds are employed

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under direct vision after suprapubic cystotomy. This method of treatment is especially applicable to patients in poor physical condition, who could not withstand total cystectomy and transplantation of the ureters; the only risk is that of the cystotomy itself. Barringer² has expressed the belief that the flat ulcerating indurated carcinoma can be treated as effectively as the papillary type by interstitial treatment.

In loosely papillary tissue, the radon seeds may fall out and it may be impossible to treat the lesion by this method. Then strong radon tubes may be held against the growth through the cystoscope, for about 300 mc. hr. at a dose. Burnam and Neill⁴ advocated up to 500 mc. hr. through the cystoscope for single tumors, and external treatment with the radium 4 or 5 gm. pack of about 1.5 gm. hr. at 2 cm.

Results of interstitial treatment of cancer of the bladder at the Memorial Hospital show control of the lesion in about 38 per cent of 205 patients treated. Five-year cures have risen to about 25 per cent.³

External irradiation by roentgen rays generated at 200 kv. has shown an inability to deliver a sufficient tumor dose to be cancericidal. The tumor dose can be increased, at 200 kv., by using 2 mm. copper filter, 70 cm. target-skin distance, using 10 by 15 cm. portals, increasing the portals to six, and using a fractional dose technic. Treating two portals daily with 300 r each, 2,400 r total (measured in air) can be given to each of the six portals in about thirty days. The depth dose in the region of the bladder is only about half that required to eradicate the cancer. Hence this external irradiation may be profitably combined with the interstitial irradiation. External irradiation alone will give only palliative results, although it is possible that the 700 to 1,000 kv. technics may achieve better results.

One other form of irradiation therapy has been offered by Levine, Pack and Gallo.⁵ They employed the Chaoul low-voltage x-ray apparatus; after marsupialization of the bladder, the opening in the bladder is maintained for short-distance treatment (3 to 5 cm.) with the low-voltage x-ray tube. Treatment is carried out daily for eighteen or twenty days, and the regression of the tumor is observed daily.

Malignant Lesions of the Prostate

Cancer of the prostate is becoming an in-

creasingly important problem with the increasing age expectancy of human life. The average age of patients who have cancer in this location is 65 years and cancer of the prostate is the most frequently encountered cancer in men in the 70-year to 85-year group.¹ In one report of postmortem examinations, prostatic cancer was found in 40 per cent of all men aged 90 years or more.

Sarcomas of the prostate occur rarely, in the form of leiomyosarcomas and rhabdomyosarcomas in young persons. They are best treated surgically.

Prostatic carcinomas may well originate on a hormonal basis. They seem to have no relationship to prostatic hypertrophy.

Early diagnosis of prostatic cancer is difficult. The symptoms are mainly frequency, dysuria and pain; most patients already have distant metastatic growths when first seen. Most of the lesions arise in the posterior lobe. The lymphatics of the prostate are drained by the external iliac, hypogastric and sacral lymph nodes. Metastatic growths occur in the lumbar portion of the spinal column, the pelvic bones and the upper part of the femora. The lungs and liver may be sites of metastasis.

On microscopic examination, the tumors are adenocarcinomas of the small-cell variety, more common and metastasizing more rapidly, and the well-differentiated adenocarcinomas.

The diagnosis is made by finding the tumor on rectal examination, with biopsy when possible; also roentgenologic studies of the skeleton for detection of bony metastatic growths are essential, and among the laboratory aids, elevation of the acid phosphatase indicates metastasis.

Treatment in the past has been surgical or by irradiation. Cure is possible by radical surgical resection of the localized cancer in the rare early case. In advanced lesions, palliation has been obtained by the implantation of radon seeds in the tumor and roentgen treatment to the bony metastatic growths. Radium implantation is best employed by perineal exposure of the prostate, for careful and exact spacing of the seeds. Radium needles, withdrawn after the requisite dose, may be employed rather than the permanent radon seeds.

Roentgen therapy can be used to exert a

parriative effect on the primary tumor, but is mainly employed for treatment of the metastatic growths. Leddy and Gianturco⁶ obtained worthwhile palliation in half of their patients by the use of roentgen therapy to the metastatic growths. Zuppinger⁷ has found that small doses of roentgen rays do no good. No cures but valuable palliation was gained with protracted fractional doses, using daily applications of 200 to 250 r per field, at 50 or 60 cm. target-skin distance to four to six portals, two anterior, two posterior, and two gluteal fields. A total dose of 3,000 r is given to each field. A perineal portal was not used because of distressing reactions from perineal irradiation. The same high total dose with fractional technic is given to the metastatic growths.

More recently, instead of irradiation therapy, palliation has been obtained by the elimination of testicular androgens by bilateral orchectomy, or their neutralization by the use of estrogens such as stilbestrol.¹ Approximately 80 per cent of patients treated by orchectomy, stilbestrol, or both, show apparently better temporary benefit than has been gained by irradiation.

Malignant Lesions of the Kidneys

Tumors of the kidneys form 2 per cent of all tumors in adults and 20 per cent of all tumors in children.⁸ Hematuria, pain and palpable tumor may be the symptoms and signs noted, with later anemia and loss of weight. Often the first symptoms noted are due to metastasis to bones or soft tissues.

Originally, most renal tumors were considered to be hypernephromas. At present, most urologists believe that the tumors arise from the substance of the kidney and not from adrenal rests. The classification of Ewing is usually followed:

1. Adenoma, single and multiple, essentially benign arising from renal tubules.
2. Adenocarcinoma and carcinoma arising from renal tubules and often from adenomas.
3. Papilloma and papillary carcinoma of the renal pelvis.
4. Adrenal tumors. Hypernephroma.⁹

About 99 per cent of all solid renal tumors are malignant, and 80 per cent of them are adenocarcinomas.¹ Most cases occur in the fifth, sixth and seventh decades, and in about 70 per cent the patients are men.

Wilms's tumors, or embryomas, occur in

children, mostly less than 7 years of age. They arise from embryonic nephrogenic tissue. On section, these tumors have a sarcomatous appearance. Metastasis occurs usually by veins to lungs, liver, brain and regional lymph nodes. Pain is a prominent symptom of Wilms's tumors when nearby nerves are invaded. The tumors reach a large size. Hematuria is not frequent. The tumors are very radiosensitive. Surgical removal is the treatment of choice, although recurrences and distant metastasis are common. Preoperative roentgen therapy shrinks the tumor rapidly, and in case of large tumors makes nephrectomy much easier. The x-ray factors used by Bothe¹⁰ are 200 kv., 15 ma., 0.5 mm. copper and 2 mm. aluminum filter, 50 cm. target-skin distance, portals 15 by 15 and 20 by 20. In adults, anterior, lateral and posterior portals are used, giving doses up to 300 r a day, to a total dose of 2,000 r per portal in twenty-four to thirty days. In children, smaller doses are given, to a total of about 800 to 1,000 r per portal. Although these tumors are radiosensitive, the results of preoperative radiation and surgical treatment are bad; the only hope is earlier diagnosis and treatment before metastasis has occurred.

Most of the malignant renal tumors of adults occur in the renal cortex, about 10 per cent originating in the renal pelvis. The diagnosis can best be made by roentgenographic studies, and by the finding of cancer cells in Papanicolau smears of urinary sediments from centrifuged urine. Retrograde pyelograms are more helpful than excretory urograms in establishing the diagnosis.

The predominant renal adenocarcinoma is rather radiosensitive. Radical surgical intervention, however, in the operable case without evidence of metastasis, is accepted as the best method of treatment. Advanced tumors can be rendered operable by preoperative irradiation. Walters and Braasch¹¹ have pointed out that an interval of two months should elapse between irradiation and surgical attack. Metastatic growths might develop in that interval, and scarring occur, making operation more difficult. Graham¹² also found that only a third of the tumors, those receiving more than 4,000 r, were reduced in size after preoperative irradiation.

However, roentgen treatment may be of considerable value postoperatively, and also

is of unquestioned palliative benefit in the treatment of metastatic growths and of inoperable extensive tumors.

Table 1, from Ackerman and del Rego,¹ shows the five-year survivals of patients having different types of renal tumors, when the best modern methods of diagnosis and treatment have been used.

Malignant Lesions of the Testicles

Testicular tumors are rare, probably constituting less than 1 per cent of all tumors, and occur usually in the 20-year to 40-year age group. From 29 through 34 years of age they are the most common tumors found in men.¹ The seminomas usually occur at a later age than the teratomas. The cause is unknown. Trauma is probably unrelated to their causation. A small per cent occur in undescended testes. According to Ewing malignant tumors of the testis are all teratomas derived from vestigial tissues in the rete testis. A very few rare types, such as choriocarcinoma, may occur; the majority are seminomas, adenocarcinomas and adult types of teratomas.

Malignant testicular tumors grow slowly and insidiously. Sensitivity of the testicle and lumbar pain are noted. Metastasis occurs along the paraaortic lymph nodes, and finally by way of the thoracic duct, involving the left supraclavicular node. Retroperitoneal nodes are often involved, and also the inguinal nodes. When enlargement of the retroperitoneal nodes is found, often by retrograde pyelograms, mediastinal involvement usually follows. Pulmonary and hepatic metastatic growths are common.

Treatment consists of orchectomy and irradiation.

Seminomas and malignant teratomas constitute about 95 per cent of all malignant testicular tumors; seminomas are six times as frequent as the teratomas. Years ago Desjardins, Squire and Morton¹³ pointed out the radioresistance of teratomas. On the other hand, seminomas are among the most radiosensitive of malignant tumors. Many radiologists employ preoperative irradiation for differential diagnosis. Ferguson¹⁴ treats three frontal portals, the first covering the scrotum and groin of the affected side, and the second and the third covering the anterior aspect of the abdomen, and two corresponding posterior portals, using—if seminoma

is suspected—200 kv., 25 ma., 0.5 mm. copper filter, 50 cm. distance, 300 r every third day to the primary tumor portal to a total dose of 1,500 to 1,800 r. When teratoma is suspected, 13 ma., Thoraues filter, 70 cm. distance, 200 r daily is given to a total dose of 2,000 to 2,400 r. The other portals over the probable metastatic regions are treated at 70 cm. distance, more heavily if teratoma is suspected.

Six weeks after completion of the treatment, orchectomy is performed, although this is not essential to cure. Ferguson has reported 29.2 per cent of five-year cures of teratoma testis at the Memorial Hospital prior to 1928, and even better results, slightly more than 40 per cent since the more modern divided-dose treatment has been employed.

On the other hand, Leddy¹⁵ at the Mayo Clinic believes that a preliminary orchectomy for absolute diagnosis of the type of tumor is essential for correct irradiation therapy. Radioresistant and radiosensitive tumors should receive different methods of treatment, in Leddy's opinion. To reduce unnecessary damage to normal tissues in radiosensitive seminomas, he uses moderate voltage, 130 to 140 kv. Four anterior and four posterior fields are treated, covering the entire abdomen to the xiphoid cartilage, the posterior fields corresponding to the frontal ones. The mediastinum and left supraclavicular region always receive treatment. One or two fields are treated daily; a total dose of only 540 r (in air) is given per field, for seminomas.

In more than 500 testicular tumors, five-year survival of 67.7 per cent was gained in seminomas, and 29.3 per cent in all other malignant testicular tumors. In seminomas, 71 per cent survived with roentgen therapy against 58.8 per cent without roentgen therapy.¹⁵

In the radioresistant teratomas, the only possibility of cure seems to be orchectomy before metastasis has occurred.

SUMMARY

In carcinoma of the urinary bladder, and in the premalignant papillomas, irradiation has a definite curative role, especially in patients too debilitated for total cystectomy and transplantation of the ureters. Randon seeds inserted through the cystoscope or after suprapubic cystotomy have one of their greatest fields of usefulness in malignant lesions of the bladder; this is also true of direct application of radium through the cystoscope, plus external roentgen irradiation.

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Destructive Aspects of Atomic Explosion

Colonel Elbert DeCoursey, MC, USA*

The effects of an atomic bomb may be classified under two main headings: Mechanical Blast and Radiation Blast.¹ Mechanical Blast may be diverted into air blast, solid blast and water blast. Radiation Blast may be divided into thermal radiation blast and ionizing radiation blast. Because the effects of mechanical blast differ only in intensity between an atomic and other high explosive bomb, these effects will be considered only slightly.

The detonation of an atomic bomb is said to result in rays that cover the entire length of the spectrum. The light resembles the spectrum of sunlight. The intensity of the heat effect was so great that in Nagasaki there were flash burns on such things as wood, oranges, and people. Such thin things as leaves, blades of grass, or thin clothing acted as filters and offered protection to their shadows.

There were many ordinary burns from secondary fires of buildings, but the characteristic burn of the atomic bomb is that received from the far away flash from the detonation in air. On patients these flash burns had sharp outlines from shadow effects. You will see this on wood and on humans. In a railroad station in Hiroshima the black letters of an exposed white cardboard sign were charred out, but the white background showed no visible change. A woman wearing a kimono with designs of red plaid stripes on a white background showed striped plaid burns across one shoulder. The dark color had absorbed enough heat to burn but the white fabric had not. In flash burns, of course, only the surfaces facing the bomb were flash-burned. Depending on distances, patients suffered 1st and 3rd degree burns.

Ionizing radiation is the agent which makes the atomic bomb unique among all other weapons. The gamma rays and neutrons not only contributed to the morbidity and mortality but also by hindsight contributed in Japan a biological experiment of unprecedented scope. Total body x-radiation has been employed therapeutically for many

years. In Japan thousands of humans, because of distances from the source and because of various shieldings received radiation from very small amounts to several times the lethal dose.

People in the open or in Japanese wooden buildings received much ionizing radiation. Those behind thick concrete or in caves, of course received less or none, according to the thickness of the filtering material. Then of course there was the factor of distance. The addition of neutrons to the gamma radiation made the inverse square of distance law unworkable; however, severity of the effects did vary inversely as the distance.

SYMPTOMS:

Clinically and pathologically the patients were easily separated into four distinct categories. **Very severe** with 100 per cent mortality; **Severe**, 50 per cent mortality; **Moderately severe**, less than 10 per cent mortality; and **mild** with almost no mortality. The outstanding symptoms were nausea and vomiting on the day of the bombing, fever, leukopenia, diarrhea, epilation, purpura, and oropharyngeal lesions.

The very severe cases had died before we arrived in Japan, so that we could study only the autopsy material.

Leukopenia developed early. A group of cases in Nagasaki studied by Japanese during the fourth week showed 26 per cent with no WBC, 16 per cent 0 to 2000 WBC, 33 per cent 2000 to 4000 WBC, and 22 per cent 4000 to 6000 WBC.

Nausea and vomiting appeared usually in about three hours, and continued longer in the more seriously affected. Along with this was a feeling that fever was present. Then there was a symptom-free period of a few days to three or four weeks with perhaps some lassitude and anorexia. Then any of the symptoms I have mentioned might appear. Epilation was the commonest new symptom, and of course it was the surest sign of ionizing radiation. This affected mainly the scalp

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and was of varying degrees. Hair came out as the patient combed or ran fingers through the hair. Then usually came diarrhea and fever, new or an exacerbation. It resembled bacillary dysentery except for lack of severe cramps and tenesmus. At about the same time as epilation came hemorrhages and mouth and throat lesions. There were swelling of gums, bleeding then ulceration which sometimes extended into large necrotic sloughing areas involving the lips and even the whole cheek wall. This was greatly like neutropenic necrosis. These were less frequent in the survivors. Both these and bronchopneumonia were cleared up in a few cases by penicillin therapy. Many wounds broke down at this time.

Purpura appeared as gingival bleeding or petechiae or larger areas of skin hemorrhage, or as hemorrhages in the intestines, kidneys, bladder and eye grounds. Thrombocytopenia was often present but I was impressed with some patients that had no apparent platelet decrease and delayed coagulation time. All these symptoms peaked in quantity between the third and fourth weeks.

About the fifth or sixth week the WBC started up and clinical convalescence had a rather abrupt onset, with disappearance of purpura and ulcers.

RBC seemed to decrease until about the sixth to eighth weeks. Anemia had aided fatally but was not a prominent factor, except in the **Very Severe** cases where critical RBC and Hemoglobin levels appeared in the third and fourth weeks. Normocytosis with tendency to macrocytosis was the rule. Reticulocytes were low, and in the **Moderately Severe** group were still less than 1 per cent in 50 per cent of patients between the eighth and twelfth weeks, when marrow activity seemed to be at a peak.

PATHOLOGY:

The ionizing irradiation affected mainly the lymphoid and hematopoietic tissues, skin, genital organs and gastrointestinal tract as seen in about 260 autopsies in Japan.^{2, 3}

Even at three days there was atrophy of lymphoid elements* in lymph nodes, spleen and gastrointestinal tract, and this atrophy was noted throughout our autopsies, which Dr. Shields Warren and I did together from September until late in November. At the end of the first week there appeared a typical

large reticulum type cells similar to Reed-Sternberg cells — evidence of regeneration.

In the bone marrow of those dying the first week there was disappearance of the hematopoietic cells except for foci of young erythroid elements. At the end of the first week regeneration was appearing as manifested by proliferating reticulum cells. This reticulum appeared to form plasma and lymphoid cells rather than myeloid cells early, this evidence being seen both in tissue sections and sternal punctures. Only after three or four weeks was myeloid regeneration distinct. Most patients dying in the first month showed hypoplastic marrow, with focal myeloid regeneration and absence of older granulocytes, a maturation defect. At our autopsies the femur marrow was red more than half way down the shaft and we thought there was tremendous hyperplasia. Some of this red picture microscopically was found to be dilated blood vessels. A few of the late deaths showed typical pink jelly-like marrows of aplastic anemia. The aplasia resulted in bacterial invasions with lesions in the nose, mouth, throat, intestines and lungs.

The scalp showed the surest gross sign of ionization, baldness occurring in the fourth or fifth week. Microscopic changes in the skin were disappointing in contrast to the gross epilation. There was some atrophy of hair follicles, with basement membrane thickening of some sebaceous and sweat glands. Regeneration appeared in the third month.

The testes showed prominent changes, all dying males having almost all their sex cells destroyed. During the first week young sex cells disappear from the tubules and the replacing Sertoli cells were apparent. It was interesting that apparently healthy mature spermatozoa appeared in crypts of the seminal vesicles and epididymides in cases where the immature germ cells have been destroyed. Also in the testes were vascular changes such as endothelial proliferation and hyalinization that I expected but did not find in the skin. Later the basement membrane was thickened.

The ovaries showed minimal changes, primary follicles being present and absence of developing follicles being the most constant finding. The endometrium was usually in the resting stage, showing no corpus luteum ef-

fect. (Amenorrhea increased after the bombing.)

The ulcerations and hemorrhages in the pharynx and intestine often resulted in death and showed a histologic picture of neutropenic necrosis with much fibrin and no infiltrating leucocytes; dilated vessels and decreased numbers of lymphocytes were present. The intestine presented a diphtheritic membrane or ulceration on the mucosa, and a very thick submucosa.

Spectacular hemorrhages in the kidney pelvis and intestines, and small hemorrhages in the eyes, mesothelial membranes, muscles, and mucosal linings of all tracts were found in varying degrees.

Those are the changes from air detonation. The actual fission products of the bomb are widely dispersed in the stratosphere and the dilution effect makes difficult a concentrated fall-out of these radioactive substances; therefore the area quickly should be free of significant radiologic hazard. The effects on tissue of alpha and beta particles, gamma rays, x-rays, or fast or slow neutrons are similar qualitatively.

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FRICKE

(Continued from Page 70)

Carcinoma of the prostate can be greatly helped by the use of radium needles, employing a perineal exposure, along with heavy doses of roentgen therapy to the regions of metastasis. Cure seems possible only by radical surgical methods in the few tumors diagnosed early. Of late years, satisfactory palliation has been gained by orchectomy, eliminating testicular androgens, and by the use of estrogens, such as stilbestrol.

In malignant tumors of the kidneys irradiation serves best as an adjunct to surgical treatment, both in Wilms's tumors of infants and in the malignant tumors of adults. Postoperative irradiation of primary fields and of regions of metastasis seems to yield best results. In large or fixed tumors, pre-operative roentgen therapy may shrink the growth and render ablation possible.

Irradiation of malignant testicular tumors achieves excellent results, especially in the more prevalent seminomas. The malignant teratomas are quite resistant to treatment. Orchectomy should precede treatment to determine the exact type of tumor, and possibly forestall metastasis. The seminomas appear to respond well to mild doses of moderate-voltage roentgen rays.

Table 1
Five-year Survivals of Patients Having
Different Types of Renal Tumors*

Type of tumor	Five-year survivals, per cent
Ulcerative squamous carcinoma	0
Wilms's tumor	10-15
Adenocarcinoma of kidney	15-25
Papillary carcinoma	25-35
Papilloma	35

*From Ackerman and del Regato.

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Socialized Medicine in Britain*

by Lawrence Abel, M.D., London

May I first express to you my deep appreciation of the great honor conferred upon me by being invited to attend this important meeting. Secondly, how deeply I realize the honor of being asked to say a few words to you. I am instructed to bring to you the friendly fraternal and affectionate greetings from the Council of the British Medical Association and also from the Marylebone Division which, situated as it is in the heart of London, is the largest division of the British Medical Association and members over 1,000 consultants and specialists in addition to many family doctors.

Your Board of Trustees has graciously asked me to leave with them a full statement on the present state of socialized medicine in England which I made last week to the American Proctologic Society in Columbus, Ohio.

Time does not permit me to do more than quote two or three paragraphs of my original detailed paper. I told the history of the improvements in medical care over the last half century, pointed out that our profession has been asking deaf governments for further improvements and especially for the provision of better and more carefully planned hospital facilities.

You may ask what have been the effects of the service so far:

(1) The Public

There can be no doubt that a big proportion of the public love it. The thoughtlessness and imprudent greed which characterizes the man or woman who is stupid enough to believe, that because they are paying nothing at the time they are getting something "free," especially if it is "Out of the Government," has to be seen to be believed.

The most serious aspect from the public angle is that the apparent and material benefits which they get at exorbitant cost cloak the real loss of true medicine. The public must realize and be made to realize that true medicine means early diagnosis and early and good treatment. What they had

under the old system was good and increasingly better doctoring.

I sincerely warn the people not to be fogged by a few so-called "free" material things to the exclusion of that intangible thing — good medical care.

How Has the Introduction of the Service Affected the Hospitals?

The repeated suggestions of the profession that hospitals should be grouped has been adopted. This is a good point.

Another good point is that the State has assumed financial responsibility for seeing that hospital beds are where they are needed and are properly equipped.

But those of you who have had experience of bureaucratic promises know what a difference exists between the promises and what actually comes about. Today it is more difficult for a patient to get into a hospital. In some areas there are waiting lists of from 12 to 18 months. Therefore, although I say it is good for the state to assume financial responsibility, this is only true if the promises are fulfilled.

On the other hand, for the state to have become the owners of all hospitals is both unnecessary and wicked. There should be no state monopoly of hospital beds. Healthy competition is good for any business.

At the whim of the state, private beds have become public beds; the price of private beds has gone up and in many cases the charge to the patient has been doubled. Not only is the private patient charged the full cost of the bed, but he has to pay in addition 25 percent over and above that cost. Whereas if he were in the adjoining general ward he would be charged nothing. The effect of this has been that in many districts private practice for the specialist has almost disappeared.

How are Hospital Finances Effectuated?

Another point is that hospital finance now depends on public finance, and already the economy screw is being turned.

* Presented to the House of Delegates of the American Medical Association.

We relied on charity and it always got us there in the end. Today it is no good crying to the Treasury.

How Does the Service Effect the Specialist?

The specialist has gone on with his work, in spite of a sense of grievance and frustration. He is now paid for his hospital work and the younger men, internes and training specialists are better paid than before. Many people think this is a good point as it does away with the years of financial hardship which many of us went through in our early days.

It has meant, however, that the specialist is now the paid servant of the hospital and not the voluntary partner, and as we all know, a paid servant is soon made to feel it. Small details set as pin-pricks. Bureaucracy always gets you on details.

General Effect Upon All Branches of the Profession

Even now after more than nine months of working there is no fixed rule with regard to the salary payable to either family doctor or specialist. The government has still not promised us the right to arbitration, which we feel should be a condition of entry.

Many of the best doctors have to spend their time in high political scheming and not in real medicine. As things have turned out, many of the things we fought for have really not been of great importance. The greatest danger of all may be the very existence of a bureaucratic machine, which by the turning of the screw, can do more damage to the doctors and hence more damage to the general welfare of the patients than anything else. With the bureaucratic machine there is the perennial danger of interference, and not only by the turning of the screw on finance.

Another reflection I would make is that probably our biggest mistake was not to fight to the death on the 100 percent issue. I want to ask you and want you to ask yourselves, have you a portion of your population who cannot afford adequate proper medical attention? This must be faced. If you have, then surely a solution must be found, but I warn you and implore you to take care that those who can afford it are not provided for!

Among the reasons for this solemn warning is this. A man's independence is in proportion to the number of sources of his income. A doctor more than anyone else is and must be

an individualist, because his work is personal and individual to each patient. Therefore, he must keep his freedom, his independence, his individuality. If only the state pays him his freedom is lost.

Another general reflection is that it is already obvious during the first year of service that, the government, as it begins to feel it has got you, gets dustier and dustier in its attitude toward you.

As an independent profession it listens to you although seldom takes advice. As many of the public love the service, no party that might come into power in Parliament dares recommend its termination. No party would alter it very substantially. The great tragedy of the whole thing is that the doctors have been brought in to the service by a form of blackmail, I. E., economic pressure. Many are in the service with ill-will, whereas with tact, careful negotiation and reasonable compromise their help could have been obtained with good-will, because the main principle of the profession was that we were out to help the government establish the best possible Health Service for the nation.

To sum up, the Service is a mixture of good and bad. The good is naturally less obvious, because all concentrate on the defects, but the bad too is not obvious. In the main, the dangers seen now for the most part derive from the very existence of bureaucratic medicine and all that a bureaucratic machine can do. If there is a problem of the sick who cannot afford to pay for the best possible modern medical treatment, you must recognize the necessity for some form of insurance service.

But let it be an insurance which the wage-earner pays and knows he is paying, or an insurance for a "grant-inpaid," so that the people do not get the idea that someone else is paying it, but knows that they are paying themselves.

I question if voluntary insurance is enough. Would the imprudent join such a scheme? Whatever you do, limit the state insurance to those who need it, leaving those who can afford to provide for themselves to do so. Do not forget that it appears that the principle of our present government is that they do not trust anyone to spend his own money and therefore collect it and spend it for him.

In spite of what I have said about the present Health Service being here to stay, do

not forget that the British have the reputation of losing all battles except the last. We have partly lost the first battle, but governments come and governments go, but the spirit of medicine in the service of humanity goes on forever. So the last battle is not yet fought between our profession and bureaucracy.

America also has a reputation! After we have suffered for months or years America takes an interest, begins to understand, develops new lines of thought, learns from our mistakes, and also comes to our aid before it is too late. This time it will not be with planes, guns, men and food, but perhaps with the moral example of a really sound Health Service for the nation, based on freedom for the patient and the doctor and not upon the slavery of the bureaucrat.

A service should come by evolution and not by revolution. The patient should have the right to contract out of the service. With a service covering even 90 percent of the population you are safe and free, but when the contract covers 100 percent you are slaves.

One of Abraham Lincoln's most famous speeches began with the words: "A house divided against itself cannot stand." I believe that he would have continued: "This profession cannot endure half slave and half free."

I think if Abraham Lincoln had been here today he might have used words something like these:

It is for us to be here dedicated to the great task before us — that we here highly resolve that this profession under God shall have a new birth of freedom and that freedom of medical care and treatment of the People, by the People, for the People shall not perish from the earth.

CUFF NOTES

Premenstrual Intoxication

The typical syndrome is recurrent, beginning insidiously from 2 to 12 days before the onset of the menstrual flow, with rising intensity of symptoms until menstruation actually starts, and then rapidly subsiding. Depression, hyperirritability, irascibility, hair-trigger temper, insomnia, abdominal fullness, headache, nausea, vomiting, low lumbar or sacral backache, aching thighs, intense hyperesthesia of the breasts, and pedal and mam-

mary edema constitute the composite clinical picture.

A series of 67 cases treated with enteric coated ammonium nitrate, 1.0 gm. 3 times a day for approximately 10 days premenstrually is presented. 91% responded with dramatic improvement and almost complete prophylactic control of symptoms. Improvement noted the first month of therapy and reached maximum in 2 or 3 months. Symptoms tend to recur upon discontinuance of therapy. Therapy is much less effective if begun after onset of intoxication. A liberal fluid intake to enhance diuresis is encouraged. This therapy is inexpensive, and relatively harmless.

Stieglitz and Kimble. *The Am. Jl. of Med. Sciences* December, 1949.

Harmful Effect of Pelvic Surgery

Question: Does removal of one ovary have any effect on the normal woman?

Answer: William Allen of Washington University states that the menopause appears about twice as soon after the removal of one ovary as might be expected when both ovaries are present. He feels that menstrual disturbances, emotional upsets and irritability occurring after such surgery indicate ovarian dysfunction.

AXIOM

"The needless hysterectomy deprives the young woman of the privilege of becoming a mother, the unnecessary removal of an ovary may commit her to a premature menopause and a subtotal hysterectomy for unrecognized carcinoma of the cervix consigns her almost inevitably to the grave."

Mumps: Preventing Orchitis

The oral administration of 5 mg. daily of stilbestrol prevents most cases of orchitis following mumps and is the best single treatment for orchitis due to mumps.

Gleanings

Osteoarthritis does not involve the wrists or fingers, except the terminal phalangeal joint.

The diagnosis of gout cannot be made upon a laboratory report of elevated blood uric acid. Normal persons may have elevated blood uric acids, gouty patients may have a normal level. The diagnosis rests upon a typical history which recurs and recurs in attacks, with complete remissions between

(Continued on Page 78)

Minutes of Council Meeting, January 29, 1950

Marvin Hughitt Hotel
Huron, South Dakota

The meeting was called to order at 2:30 by Chairman, Dr. D. A. Gregory. Dr. Stansbury moved that the roll call be dispensed with because the attending members had already been listed by the secretary. The motion was seconded by Dr. Whitson and carried. Officers present were Dr. W. H. Saxton, Dr. D. A. Gregory, Dr. H. R. Brown, executive secretary John C. Foster, and attorney Karl Goldsmith. Councillors present, Dr. E. M. Stansbury, Dr. R. E. VanDemark, Dr. G. E. Whitson, Dr. F. D. Gillis, Dr. M. M. Morrissey, Dr. B. T. Lenz, Dr. C. R. Stolz, Dr. R. E. Jernstrom. District officers and guests present, Dr. L. C. Askwig, Pierre; Dr. D. H. Breit, Sioux Falls; Dr. Mary Schmidt, Watertown; Dr. D. Fedt, Watertown; Dr. H. J. Grau, Rapid City; Dr. C. M. Kershner, Brookings; Dr. Donald Slaughter, Vermillion; Dr. P. G. Bunker, Aberdeen; and Mr. Lawrence Rember, Ama, Chicago.

Mr. Foster brought up the subject of the collection of the A.M.A. dues. Dr. Stansbury moved that the work be done by direct billing from the state office and that a very definite letter be sent out to each member of the State Association explaining the situation which would save each local secretary a lot of work. Motion seconded by Dr. Jernstrom and carried.

Mr. Foster read a letter from Dr. Lull of the A.M.A. stating that South Dakota was #22 on a list of 53 constituent associations in payment of 1949 assessments.

Mr. Foster read the recommendations from the A.M.A. House of Delegates that the association set up a Grievance Committee. A motion was made by Dr. Whitson and seconded by Dr. Stansbury that a committee of three be appointed to investigate the setting up of a Grievance Committee and report back to the council at the next meeting. Dr. Saxton appointed Dr. Whitson, Dr. Lenz, and Dr. Stolz to the committee.

Dr. Whitson made a motion that we submit the four names of South Dakota pediatricians to the governor for him to choose one for the

committee on Children and Youth. Dr. Stoltz seconded the motion, carried. The four pediatricians are Dr. C. W. Ihle, Dr. W. E. Donahoe, Dr. Mary Schmidt, and Dr. G. Zimmerman.

Mr. Foster read a letter from the Madison-Brookings district requesting that the State Association sponsor the A.A.P.S. Essay contest. Dr. Jernstrom made the motion that the contest be sponsored and prizes of \$25.00, \$15.00 and \$10.00 be awarded. Motion seconded by Whitson, and carried.

A letter from Dr. Davidson in Lead concerning social security for physicians was read by Mr. Foster. Dr. Brown moved that the letter be referred to the committee on Medical Economics. Motion seconded by Dr. VanDemark and carried.

Dr. Brown reported on the Medical School Affairs Committee which met Saturday evening, January 28. Dr. Saxton moved that Dr. Pfister of Webster be nominated as a director of the Medical School Affairs Committee. Dr. Jernstrom made a motion nominations cease and that a unanimous ballot be cast by the secretaries. Dr. Stansbury seconded the motion, carried.

Mr. Foster brought up the subject of certain doctors not being satisfied with the Schedule of Payments of the Polio Foundation. Dr. Morrissey moved that the dissenting persons appear at the next council meeting and be given a hearing and that a representative of the National Polio Foundation should be present also. Seconded by Dr. Whitson, carried.

Mr. Foster read a letter from the Nurses Association requesting money for promotion of their activities. Dr. Stansbury moved that \$50.00 be granted to the Association for survey activities contingent upon any new revenues accruing to the Medical Association. Seconded by Whitson, carried.

After a request from CARE for \$1,000.00 was read by Mr. Foster, Dr. Whitson made the motion that we inform CARE that we are in favor of their work but at this time our

budget does not permit participation. Motion seconded by Gillis, carried.

Dr. Whitson made a motion that the attorney, Karl Goldsmith, be instructed to prepare an amendment to the Basic Science Law permitting the Basic Science Board in its discretion within certain limitations, to issue Basic Science certificates to practitioners who have been in active practice for a reasonable number of years and hold certificates in other states. Seconded by Dr. Stansbury, carried.

Dr. Whitson made the motion that Dr. Billingsley be added as an associate editor for the South Dakota Journal of Medicine and Pharmacy. Motion seconded by Dr. Stoltz and carried.

Mr. Foster brought up the subject of the Coop situation in Winner, no action.

Dr. VanDemark moved that letters from persons concerning cancellation of insurance policies be referred to the committee on Prepaid Medical Care. Dr. Stansbury seconded the motion, carried.

Dr. Gillis moved and Dr. Whitson seconded the motion that the matter of DP membership in the Association be referred to the committee on Revision of Constitution and By-laws, carried.

A copy of a letter of solicitation for patients sent out by a member of the Association was read. Dr. Saxton made the motion that the matter be referred to the Board of Censors of the district involved for action. Dr. Stansbury seconded the motion, carried.

Dr. Breit presented a request that a Hospital and Professional Relations Committee be appointed. Dr. Whitson moved that the council endorse the idea of such a committee and that it be incorporated in the Grievance Committee if and when a Grievance Committee is set up.

Dr. Stansbury moved and Dr. VanDemark seconded the motion that the meeting adjourn, carried. (5:00)

(Continued from Page 76)

and a dramatic improvement after oral colchicine, maximum doses until diarrhea occurs.

Treatment of Heart and Kidney Disease and of Hypertensive and Arteriosclerotic Vascular Disease with Rice Diet.

Is either ineffective or dangerous unless it is done under rigidly controlled conditions.

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From where I sit by Joe Marsh

Gabby Enjoys Going to the Dentist

One of my molars was giving me a bad time Tuesday, so I slipped over to Doc Jones, hoping to catch him free. When I arrived, Gabby Jackson was sitting there reading a magazine. I said hello to Gabby and he nodded.

Doc comes out and says I'm next. "Wait a minute," I says. (My tooth seemed to have stopped aching.) "How about Gabby—doesn't he have an appointment?" Doc smiles and says, "Gabby? Why, he's got the finest teeth in the county. He just comes up here and reads magazines when he's in town!"

As Doc went to work he told me he's glad to have Gabby read magazines . . . they might not all be fresh off the newsstand, but if Gabby—or anyone—wants to while away some time, who is he to stand in his way?

From where I sit, this "live and let live" spirit helps make America what it is. If I prefer a friendly glass of beer with my supper and you happen to prefer milk—who's to say one's right and the other wrong?

Joe Marsh

Minneapolis General Hospital

School of Nursing

HISTORY

The original Minneapolis General Hospital School of Nursing was established in 1893 as an 18-month course. In 1898 it was lengthened to two years, and in 1904 to three years. It continued so until 1920 when it joined with the University, Northern Pacific, and Miller Hospital Schools to form the Central School of Nursing which was later known as the University of Minnesota School of Nursing. It remained a part of the University School until January of 1947 when the five-year undergraduate program became the basic curriculum at the University.

The Minneapolis General Hospital School of Nursing was re-established as a three-year program with the admission of the September 1947 class. It is fully accredited by the State Board of Nurse Examiners.

TUITION

The student will pay no tuition to the hospital but will pay such tuition as is charged by the University of Minnesota for courses taken there. Since it is planned that the student carry 15 to 17 credit hours at the University for each of the first two quarters and the fee is \$5.00 per credit hour, the tuition will be \$75.00 to \$85.00 for each of these two quarters. There will be no further tuition fees unless the student elects more University work. This would require the approval of the faculty of the School of Nursing.

BOOKS, UNIFORMS, AND STREETCAR FARE

Approximately \$200.00 will cover such costs over the three-year period. The major part of this occurs during the first two quarters in the School.

MAINTENANCE

Students desiring board and room during the first two quarters when registered for classes at the University may make necessary arrangements in the Minneapolis General Hospital Nurses' Residence (Harrington Hall). The rate is \$40.00 per month. In addition, they should plan to pay for their noon-day meal on the Campus when they are unable to

return to the hospital. After the first two quarters, no maintenance is charged. Harrington Hall is a 13-floor building, well planned to provide for needs of students.

STIPENDS

During the last six months of the three-year course, the student nurse will be paid a stipend of \$35.00 per month.

MINIMUM QUALIFICATIONS

- A. Graduation from an accredited high school with indicated ability to maintain "C" average on collegiate level.
- B. Satisfactory ratings as the result of writing nursing aptitude tests approved by the Minnesota League of Nursing Education.
- C. Satisfactory physical health. Pre-entrance examinations will be done by Minneapolis General Hospital physicians before final acceptance to the School.
- D. A personality which would appear satisfactory to nursing (as far as can be determined by the nursing tests, personal history, and personal interview).
- E. A minimum age of 17 years.

CURRICULUM AND CLINICAL EXPERIENCE

- A. The major part of the first two Quarters in the School are spent at the University of Minnesota where the medical sciences essential to nursing are taught. In addition, sociology, psychology, and English are given.

During the third quarter of the first year, the student carries theory at General Hospital and in addition spends 15 hours in clinical experience on the hospital wards.

Beginning with the fourth quarter, the student has class and a clinical experience assignment totaling not more than 40 hours per week.

- B. Clinical experience is given in medicine, surgery, obstetrics, pediatrics, psychiatry, operating room, out-patient department, communicable diseases, private patients, and rural experience. Minneapolis Gen-

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EDITORIAL PAGE

PUBLIC RELATIONS AND DOCTOR-PATIENT DISPUTES

Some time ago I received a letter from two South Dakota physicians stating that they had received numerous complaints from patients in a neighboring community that the local doctor in that community was charging all that the traffic would bear. These two physicians felt that while the situation was aiding them by increasing their practice, nevertheless the medical profession as a whole was suffering poor public relations because of these excessive charges, and they wondered if the State Medical Association couldn't do something to rectify the condition.

At the January meeting of the Council a committee was appointed to investigate plans for organizing a so-called "grievance committee." According to reports in various journals and even lay magazines these grievance committees formed to investigate peoples' complaints are reaping good dividends in settling doctor-patient disputes. Such committees have proven their worth in Colorado, Oklahoma, New Mexico, Nebraska, California and other places.

While fee complaints make up the greater part of the reports, other grievances and gripes are also heard and investigated. The great majority of complaints can usually be settled very easily because they are due to misunderstanding regarding services received, costs of extensive x-ray and laboratory work and special examinations. Frank discussion often leads to satisfactory settlements. While we believe that the large majority of South Dakota physicians are fair in their charges for services rendered to their patients, only a few isolated instances of excessive charges can do much damage to the entire profession.

An article in the February issue of the Nation's Business entitled "Every Patient Has His Day" tells how "Socialized Medicine got a slap when Alameda, Calif., doctors policed their own house." The doctors there went on the theory that good public relations

consists about 90% in correcting those shortcomings that cause bad public relations, and they supplied public information on those points.

These boards or committees are set up in various ways, sometimes being composed of past presidents of the state society, others being elected by the House of Delegates, and still others being appointed by the president of the state medical association. Some committees are both executive and judicial in function, can discipline as well as judge, or at least submit recommendations for discipline. Each type of complaint calls for three distinct steps: first, an effort is made to adjust the doctor-patient dispute by correspondence or by telephone. Failing this, an informal investigation is made followed by an informal hearing before a subcommittee. Finally, if necessary, a formal hearing is held before the full committee.

A grievance committee's function is not only to crack down on the occasional practitioner but it also protects the ethical doctor from ill-founded complaints of patients and plain cranks. Wherever these committees have been properly set up they are functioning well. The House of Delegates of the A.M.A. at its Washington, D. C., meeting in December, 1949, adopted a resolution which proposes the establishment of grievance committees by county and state medical societies. The officers and the Council of the State Medical Association, and particularly the Committee would appreciate hearing from South Dakota physicians as to their ideas regarding plans for such a grievance committee in our state.

R. G. Mayer, M.D., Aberdeen, S. D.

PHYSICIANS, PHARMACISTS AND PRESCRIPTIONS

Under the title "The Hot Breath of a Federal Inspector" the February issue of the American Druggist publishes an editorial calling attention of pharmacists to the fact

that the federal authorities are stepping up enforcement of the Food, Drug and Cosmetic Act to prevent unauthorized refilling of prescriptions by retail pharmacists, and to stop druggists from dispensing prescription drugs over-the-counter. And in another article in the same issue a well-known Washington correspondent describes the cases as heard by the United States Federal District Courts.

Criminal prosecution cases were initiated against twenty-five retail drug stores and their pharmacists in various states. All except one of the cases resulted in a sentence. According to this article unauthorized refills and over-the-counter sales of various forms of barbiturates formed the basis of most of the cases in 1949, but other drugs, such as Benadryl, Dexedrine, Benzedrine, Sulfonamides, Diethylstilbestrol, and son on, were mentioned in some instances.

Physicians could help the pharmacists by definitely marking their prescriptions "Non. rep. — non repetatur — not to be repeated (or refilled)," or if they want the prescription refilled once or twice marking it "Repetatur 1 or 2" as may be indicated in that particular case. This will call the matter to the pharmacist's attention in a definite manner, and make him more alert in obeying the federal laws.

It would also help if physicians would advise patients about the dangers to patients of promiscuous refilling of prescriptions without re-check examinations, and drawing attention to the even more dangerous custom of passing prescriptions on to friends and relatives for treatment of supposedly analogous symptoms and conditions. A few words on the evils of self-medication might also be appropriate. This might ease some of the pressure which is put upon pharmacists by their customers who insist on having refills on prescriptions without first getting approval from their physicians.

R. G. Mayer, M.D., Aberdeen, S. D.

OUR ANNUAL MEETING

The sixty-ninth Annual Meeting of the South Dakota State Medical Association will be held in Mitchell, May 21, 22, 23 with sessions at the Masonic Temple and headquarters at the Lawler Hotel. Registration may be made at either location.

The scientific program is rapidly being rounded into shape and it promises to be as outstanding as others in years past.

The usual barn-burner of a smoker is scheduled for Sunday night, May 21 and is open to all members and exhibiting representatives.

The exhibitors have selected their spaces and other excellent display is on top, bringing you the latest and best in drugs and equipment.

Hotel accommodations are at a premium so reservations should be made promptly — don't forget the excellent motor courts, too.

The banquet speaker will be Dr. E. J. McCormick, vice-president of the American Medical Association.

GULLIBLES' TRAVELS

January 24, in the morning along with **Ron Oliver**, the Kelly-Doett salesman, and our wives, took off for Sioux City and the Sioux Valley Meeting. After traveling about ten miles, we ended up in the ditch and decided that the icy highway weren't worth the risk so returned to Sioux Falls.

On the 25th, in the evening, I spoke to the Sioux Falls Druggist's Association discussing the "Political Aspects of the Drive for Socialized Medicine."

Drove to Winner where I sat in with the local doctors in their talks on the problems of the cooperative hospital, with an attorney named **Hanson** from St. Paul and **Drs. Hardwicke** and **Lichtenberg** who represented the Cooperative Health Federation of America. Returned on the 27th and assembled things for the Council Meeting on the 29th. **Larry Rember** of the AMA Public Relations Department came to Sioux Falls Saturday afternoon, the 28th, and accompanied **Dr. VanDemark**, **Miss Sundstrom** and myself to the Council Meeting. In spite of the poor weather, we had an excellent turn-out.

On the 30th of January, I spent half the day at the Veteran's Administration ironing out some of our financial problems with **Mrs. M. M. Snow**, the capable finance director of the VA Center.

On the 31st drove to Pierre and attended a meeting of the allied groups who are now making the "Nursing Needs Survey" in the state.

On the 2nd of February accompanied by **Mr. Musgrave** who handles the Journal contract with Midwest-Beach Company, I drove to Kansas City to attend the National Conference on Rural Health. **Dr. Peeke** of **Volga** had preceded me there and met with the chairmen of Rural Health committees of all state societies.

Returned from there on the 5th in time to speak to the Sioux Falls District Medical Society on the 7th on the subject of "Cooperatives."

I left early the next morning for Pierre, picking up **Dr. Saxton**, president of the Association on the way, and appeared before a joint House-Senate committee which killed a bill which was dangerous to the sound operation of the Basic Science law.

Returned that night and drove over to Pickstown the next afternoon where I talked to the Pickstown Lions at the request of **Dr. A. B. Scales**.

Left for Chicago the next day and drove as far as Mason City on somewhat slippery roads. Arrived in Chicago on the 11th where I attended meetings of the "Conference of Educational Campaign Chairmen" along with **Dr. Whitson** of Madison, and **Dr. Mayer** of Aberdeen. After the meetings, I spent several days in northern Michigan just sitting.

Returned to Sioux Falls on the 18th and then at the request of **Dr. Grossman** of **Orange City**, I spoke to the Orange City Lions Club Monday night.

On Wednesday, I spoke along with eight members of the medical profession in Sioux Falls to a group of auxiliary members and their guests at the History Club. **Mrs. James Y. Clark** tendered the invitation to speak to the group.

Spent the 25th & 26th at Pre-Payment Committee meetings in Watertown where **Dr. H. R. Brown**, **C. E. Sherwood**, **T. W. Reul**, **R. G. Mayer** and myself formed the committee.

A. C. S. SECTIONAL MEETING

The American College of Surgeons will hold a Sectional Meeting in Winnipeg, Manitoba on April 3 and 4 at the Fort Garry Hotel. At this meeting the States of South Dakota, North Dakota, Iowa, Minnesota, Nebraska, and Wisconsin and the two provinces of Saskatchewan and Manitoba are participating.

All of the Fellows of the College of Surgeons and Junior Members are requested to be present at this meeting if possible, and a cordial invitation is also extended to any South Dakota Doctor interested in surgery.

Your hotel accommodations should be made as early as convenient at either the Fort Garry or Royal Alexandra Hotel.

A very interesting two-day program has been arranged with Doctors from Rochester, Minneapolis, and Duluth, as well as several Doctors from Canada participating in the various papers and panel discussions.

We hope many South Dakota Doctors will plan to be present at this meeting.

E. A. Pittinger, M.D.,
Chairman of American College
of Surgeons.

POLITICAL DISH FOR 1950

The 1950 political campaign is just getting well under way at the time this issue is going to press. Running for various important offices from the state of South Dakota in the Republican primaries are: **Francis Case**, **Chan Gurney**, for United States Senator. Announced to date on the Democratic ticket for Senator is **Dr. John S. Tschetter**, currently mayor of Huron.

For the 2nd District nomination for Congress, **E. Y. Berry** and **Joe Bottum**. The Democratic candidates have not been announced.

In the 1st District, **Harold Lovre** will run for Republican ticket and **Merton Tice** has thrown his hat in the ring for the Democrats.

The Governor race as far as the Democrats are concerned seems to be pretty well sewed up for **Joe Robbie, Jr.** The Republican field is wide open with a slate of candidates. It is almost sure to throw the final selection into the state convention. Those currently announced are: **Joe Foss**, **Sig Anderson**, **C. A. Dalthrop**, **Boyd Leedon** and **L. Erickson**.

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This is



MARCH
1950
Vol. 3 No. 3

YOUR MEDICAL ASSOCIATION

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

THE INTERNATIONAL AND FOURTH AMERICAN CONGRESS ON OBSTET- RICS AND GYNECOLOGY

May 14 - 19, 1950

Hotel Statler — New York

The Chairman of the General Program Committee for the forthcoming Congress is **Dr. Howard C. Taylor, Jr.** of New York City. To date the following speakers have been placed on the program by Doctor Taylor and assigned the designated subjects. Each paper will be about twenty-five minutes in length and will be followed by a formal discussion.

Professor Heinrich Martius of the Department of Obstetrics and Gynecology of the University of Goettingen in Germany will speak on the general topic: Radiation Techniques and Results in the Treatment of Cancer of the Cervix.

Dr. Leon Gerin-Lajoie of the University of Montreal will speak on utero-salpingography as a means of differential diagnosis in hemorrhages of the uterus.

Dr. Carlos D. Guerrero of Mexico City will present an address based on the use, misuse and abuse of surgery in gynecology.

Dr. Arthur T. Hertig of the Harvard Medical College will

address the Congress on "Implantation of the Human Ovum."

Dr. Carl Kaufmann, Professor of Obstetrics and Gynecology of the Faculty of Medicine at Phillip University at Marburg in Germany will speak on the subject of the relations of endocrinology to gynecology.

Dr. Hans Ludvig Kottmeier of the Gynecological Department of the Radio-pathology Institute in Stockholm, Sweden will lecture on various aspects of cancer therapy.

Dr. Laksmanaswami Mudaliar of Madras University in Madras, India will speak on a topic related to the toxemias of pregnancy.

Dr. Manuel Luis Perez of Buenos Aires has taken as his subject: "The Usefulness of Antibiotics in Obstetric Surgery."

S. R. M. Reynolds, Ph.D., of the Department of Embryology at the Carnegie Institute in Washington, D. C. will speak on. The Contractility of the Human Uterus and Its Physiological Basis.

Dr. Walter Seegers of the Department of Physiology of Wayne University College of Medicine in Detroit will talk on the work done by him and

Dr. Charles Schneider on the fundamental aspects of the blood clotting problem and the practical aspects of the problem in obstetrics.

Dr. Harold H. Sheehan, Professor of Pathology at the School of Medicine of the University of Liverpool in England will speak on the kidney in abruptio placentae.

Dr. Jean Snoek of the Hospital St. Pierre at the University of Brussels has for his subject: Some Aspects of the Renal Function in Pregnancy and Their Morbid Consequences.

Dr. Herbert F. Traut of the University of California Medical School will speak on the early diagnosis of uterine cancer.

The above speakers are all to appear during the five morning general sessions of the program and the list is but partially completed. Other noted men will take part in the afternoon programs of the medical section of the Congress being arranged by a sub-committee headed by **Dr. Newell Philpott** of Montreal. Separate afternoon programs are being arranged for nurses by **Miss Margaret A. Losty, R.N.** of New York, for public health people by **Dr. Edwin F. Daily** of Washington and

for hospital administrators by **Dr. G. Otis Whitecotton** of Alameda. Doctor Daily is also arranging the program of speakers on the economic aspects of obstetrics and gynecology that will occupy Wednesday morning. The Wednesday afternoon program will be entirely planned and presented by the National Federation of Obstetric-Gynecologic Societies. For registration details, housing data and other aspects of the Congress address inquires to **Dr. Fred L. Adair** at 161 East Erie Street, Chicago 11, Illinois.

NEWS NOTES

Two scientists from widely separated cities of the world visited the Medical School of the University of South Dakota. Dr. G. Pauletta of Milan, Italy, arrived on the campus February 2, and Dr. L. L. Manchey of Philadelphia arrived on February 8.

Dr. Pauletta is director of research for the Carlo Erba company of Milan and made the trip to the University's Medical School to consult with Dr. Slaughter and Dr. Jacob Belargorsky, assistant professor of pharmacology. He is interested in experimental work the Medical School is doing on one of that company's preparations which concerns the relief of certain heart and blood vessel diseases.

Dr. Manchey is medical director of the W.K. Wampole company of Philadelphia. His visit on February 8 was for the purpose of consulting with Dr. Slaughter and the pharmacology department of the Medical School regarding problems

involving the use of a drug to treat high blood pressure.

Dr. Park B. Jenkins, first superintendent of the South Dakota state board of health, died Monday, February 6, at a Sisseton hospital.

Dr. Jenkins, who was instrumental in the organization of the health board, underwent surgery at Rochester, Minn., last December when a leg was amputated. Death was believed caused by a stroke. He was 78.

He first served as superintendent of the board in 1928, later from 1930 to 1934. He then retired to a small private practice in Waubay. Survivors include two sons, a brother and a daughter.

Funeral services for **Dr. J. S. Bates** were held at the Congregational church in Clear Lake, Sunday, February 5, following a short service in the home at Lake Preston. Masonic commitment services were held at the Clear Lake cemetery. **Dr. Bates** practiced medicine at Clear Lake for 30 years. Survivors include the widow and one son, Jipson of Montevideo, Minn.

Lange, Maxwell and Springer Ltd., sole distributors of a number of leading publishing houses in England and Germany are consequently in a position to supply or give information concerning all new Scientific and Technical publications appearing at present.

If the members would like to be notified of any new book or periodical in their particular field of interest, notify Lange, Maxwell & Springer Ltd., Scientific

Booksellers, 41-45, Neal Street, London, W.C.2.

SOUTH DAKOTA PLAN SHOWS STEADY INCREASE

The 11th quarterly report of the St. Paul Mercury Indemnity Company on the South Dakota Injury Illness Expense Plan has been received at the executive office. The report shows that from February 12, 1947 to December 31, 1949 there have been \$376,377.29 in premiums written with a total of \$304,401.64 premiums earned. The losses incurred, not including loss expense, totaled \$292,242.71. The number participating showed a total of 14,542 people covered by the insurance as of the first of this year.

"PHYSICIAN'S SPECIAL" FEATURES TRAVEL IN WESTERN STATES

The Physician's Special, departing on June 20th, from Chicago for the annual convention of the American Medical Association in San Francisco, will offer many unusual attractions and diversified features, according to American Express Travel Service. The escorted tour via special train brings to physicians residing in eastern states a timely convention-plus-vacation plan on an economical level.

The program provides scores of prearranged sight-seeing tours throughout the colorful west. A choice of three return routes from San Francisco, each an attractive itinerary with unique appeal, had also been provided, with arrival back in Chicago on

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ALLERGY COLLEGE SECRETARY ON ANNUAL PROGRAM

Fred W. Wittich, M.D., Secretary of the American College of Allergists, Minneapolis, Minnesota, will speak on "Treatment of Acute Allergy Met in General Practice" at that Annual Meeting of the South Dakota State Medical Association to be held in Mitchell May 21, 22, and 23.

Dr. Wittich is a graduate of Johns Hopkins Medical School, managing editor of "Annals of Allergy," editor of "Quarterly Review of Allergy and Applied Immunology" and a member of the faculty of the Continuation Center for Medical Study at the University of Minnesota.

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July 8th or 9th. The offering is patterned on the popular tour on which hundreds of physicians and their families traveled to the AMA convention in San Francisco in 1938.

On the trip westward local tours are made in the Grand Canyon of Colorado and in Los Angeles areas, the former area offering the breathtaking grandeur of colorful

natural formations that has brought the region worldwide renown.

After four-convention filled days in San Francisco passengers start homeward over their choice of three return routes.

Return tour No. 1 is by way of the Pacific Northwest and the Canadian Rockies, with local sightseeing trips in Portland, Seattle, Vancouver and Victoria and through the marvelous scenic beauty of the Lake Louise sector.

Return tour No. 2 from San Francisco follows a route through America's scenic west, with visits in Yellowstone National Park, Utah, Colorado, the Royal Gorge and Pikes Peak. Featured is a two and a half day tour of famed Yellowstone Park, where commanding attractions include Old Faithful, Grand Canyon of the Yellowstone, Mammoth Hot Springs and views of Mt. Washburn and Tower Falls.

Return tour No. 3 from the convention city emphasizes the most interesting features of the cities of Portland, Tacoma and Seattle and the appealing natural beauties of the Ranier and Glacier National Parks.

The combination of sightseeing adventures offered by this economical Convention-Plus-Vacation plan provides a memorable experience that will serve as a fitting climax to convention days in San Francisco. From Chicago, return route No. 1 \$435.20, No. 2 \$453.95, No. 3 \$418.95 all plus tax. Convenient tour connections are offered from other cities.

INSURANCE COMMITTEE MEETS IN WATERTOWN

The Pre-Payment Insurance Committee of the South Dakota State Medical Association met in Watertown February 25 & 26 at the Lincoln Hotel. Present at the meeting were Chairman, H. Russell Brown, M.D., R. G. Mayer, M.D., C. E. Sherwood, M.D., T. W. Reul, M.D., and John C. Foster, executive secretary.

The committee also met with representatives of the Western Iowa Blue Cross. Sessions were held in the Lincoln Hotel on Saturday from 4:00 until 1:30 p.m. On Sunday from 9:30 a.m. until 2:30 p.m. Recommendations on the South Dakota Injury Illness Expense Plan will be made to the House of Delegates at the Annual Meeting in Mitchell.

X-RAY TECHS. TO CONVENE IN MITCHELL

South Dakota Society of X-Ray Technicians is planning to hold the 2nd Annual Convention at Mitchell in the Courthouse on Saturday, May 6, 1950. Registration begins at 9:00 A.M., Business Meeting at 10:00 and the afternoon Educational Program from 1:30 to 5:00.

All technicians, registered and non-registered, working and retired are most welcome. Our doctors are too, of course.

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BLISS C. WILSON, Editor

Contact of Collision?

by John A. MacCartney,

Manager, Trade Relations, Parke-Davis Co. Kentucky Pharmaceutical
Association Convention Address

If anyone were to ask you, as a retail pharmacist, whether or not you considered the physicians in your community as important to the success of your business, I am very sure your answer would be an emphatic "yes." But from many private conversations and some personal experiences, it is apparent to me that many retail pharmacists either do not carry out the conviction of their statement or privately believe the physician is actually their competitor.

While the national picture would probably indicate that most pharmacists not only consider the physician as an important asset to their business but also cultivate good relations with him by every possible method, I believe that, when we get down to a local level, we occasionally find a rather startling situation. The real attitude of a few retail pharmacists is something like the story told by Briant Sando concerning the reading of a health statistic report in a small New England town meeting. The story goes that at the annual town meeting, the village clerk was reading the various statistics, such as, budget, public utilities, sewers, and finally, health. The official reading of his report ended with "and this is a pretty good showing—with the vital statistics reading 11 point 7." One old codger in the back of the room turned to his neighbor and asked just what the clerk meant. The neighbor answered: "I guess what he means is that 11 people died and 7 are at the point of death." Is it possible that your relations with the physicians in your community are, either through malnutrition or deliberate starvation, in much the same situation—some dead and the rest at the point of death?

The question which every retail pharmacist must answer privately and honestly for himself is whether his relations with the physicians in his community are good or bad and, much more importantly, just how he himself feels about it. In other words, are you interested in better co-operation with the doctor; or to put it bluntly, do you have the attitude of a very small minority of retail druggists who say they do not care what the physician thinks or does, and that they can get along very well without his support or his influence? You may not feel that way, but perhaps you know pharamcists who do.

As for that small—and I hope vanishing—minority who say they simply do not care what the physician thinks of them, I can only say that if they can get along without prescription business and honestly do not care what the physician thinks of them or their store, **they are not in the drug business.** They are simply using the drug store name as an excuse—a sort of legal hunting license—to compete with other types of retail stores.

You and I have both seen an occasional store which fits that description. Some of them are rather like cetrain laws, like the law in one of the Middle Western states which requires all the beer taverns to keep a pot of soup simmering at all times. I remember an example from my own youth that perhaps is even better. I had an uncle whom the family called—as Bob Burns would say it—my "my sportin' uncle"—and once in a while on one of his "shopping trips" to the nearby city, he would take me along. Somehow he always managed to do most of his shopping in the nearest bar. In that state, they had just such

a law—requiring all drinking establishments to provide food service. There, however, the sarcastic obedience had been carried to what I believe is the ultimate extreme. The only “food” visible in the entire establishment was a beautiful molded china plate on which there appeared to be a slice of bread and a fried egg—both, actually, beautifully molded into the crockery.

You might say—just what do china fried eggs and soup pots have to do with the retail drug business, and specifically, with our relations with the physician? Not too long ago, I was in a retail drug store where the prescription department was maintained apparently for exactly the same purpose as that china egg I just mentioned. It was far back in a dark corner, it occupied a space which was fully two feet by four feet, and consisted of little more than an impressive set of fancy labeled shelf bottles—every one of which was an empty dummy package! That prescription department—and any possible connection between that retail drug store and the physician—was nothing but an empty subterfuge, lip service toward the legal license which they held as a retail pharmacy.

I am sure that none of you are in the category of this example, but I do believe that some of us have permitted our relations with the physician to drift along until they become anemic gestures giving little promise of regaining healthy vigor without some rather drastic therapy. I believe that some of us have never analyzed our personal situation in this matter and too few of us have any workable plans for the improvement of these vital relations. The first thing which the retail pharmacist must do is to make up his mind to either pull with the physician or to go it alone. In either event, your decision must be guided in the course you believe will lead to the greatest ultimate benefit, both in satisfaction for services rendered and in profit.

To completely answer the question—How can I get the physicians to work more closely with me?—would require hours of time and volumes of material, because there are literally thousands of tangible and intangible factors involved; but generally speaking, they can be reduced to a relatively few essentials. I will try to state them, with brief comments.

1. **Personal attitude.** It has been said that nobody can fool a dog or a baby—you either

like them or you don't—and they can detect it instantly. Perhaps it's instinctive; perhaps it's in your voice and your attitude; but the important point is that if you want your physicians to work with you, you have to show them that you do. You must express, both by word and action, a complete willingness to co-operate—and your demonstration must be absolutely sincere.

2. **Know your stuff.** The physician, like any other good workman prefers to associate with other good workmen. This means that you must have a professional attitude—you must be able to use appropriate language—and you must know your pharmaceutical business forward and backward. Lastly in this category, it will do no good if you possess all of these qualities and yet “hide your light under a bushel.” Your biggest single job is to somehow let the physician know, without egotistica bragging, that you **do** know your stuff.

3. **Store's appearance.** Almost without exception the successful physician will be found to maintain a well appointed and absolutely clean office. He does so, not only because of the professional propriety of clean surroundings for the practice of medicine, but even more importantly, because he realizes that his surroundings react to his patients his own competence and his own estimate of his ability. Since there is a growing tendency to consider the drug store as a sort of show window, it is important that your whole store reflect an attitude of business competence and professional confidence. To put it another way—even though your professional attitude is correct, your store—your workshop—must be a fitting and proper setting for the picture you plan to create in the mind of the physician. You cannot have a 45-calibre story with a 22-calibre store!

4. **Store's “atmosphere.”** Under this classification, I want to sharply differentiate the general atmosphere or “feeling” of your store from the physical appearance of the establishment. Atmosphere, in the sense it is used here, is an intangible and often quite elusive thing. Some stores have it, and others, with equally good fixtures, equal cleanliness, and all of the other ingredients, somehow just never quite achieve what is commonly called “atmosphere.” No sure-fire formula for the development of this essential ingredient in doctor and patient confidence can be given,

but certainly the points already enumerated will go far toward the creation of this desirable quality in your store.

It might be well to bear in mind, when considering this intangible asset, that active promotion of greater prescription business volume implies more visits to your store by a larger number of what might be called sick customers. They are not shopping for drug sundries. They are people who need a prescription filled because they, or some members of their families, are ill. Their mental attitude is greatly different from that of the casual shopper, and any pharmacist would be well advised to bear that fact in mind in the manner in which he handles such customers. Slap-dash methods of handling such a customer—rapid-fire salesmanship—or indifferent presentation of the item required will be doubly resented.

5. **Community standing.** The next thing which I believe we must consider is the community standing of you and your store. We all can do much more toward becoming a vital part of our community life, and most of us can contribute far more than we do toward the growth of the community in which we live and have our business. Become active in the affairs of your local service clubs, church groups, Parent-Teacher Associations, and other equally worthy cooperative civic activities. Even from a selfish viewpoint, such participation pays off, because it is probably the best advertising you can buy.

Now let's get back to a question which you will logically ask: **JUST HOW WILL THE DEVELOPMENT OF BETTER INTER-PROFESSIONAL RELATIONS PAY OFF FOR ME?** First, and most important, I refer you to the often-published facts concerning the enviable dollar volume and proportionate profit percentage which large prescription volume yields. Many pharmacists, who have vigorously pursued greater prescription volume by the development of better relations with their community doctors, know that there is no form of business stimulation where the results are reflected faster in cash register receipts. Few efforts will bring back so fast the bread cast upon the waters. And there is another way in which good inter-professional relations pays off—in the immense feeling of satisfaction and pride you will have when you know you are rendering

a really vital health service to your community. This payoff will come to you in the confidence of your fellow citizens and in the attitude of partnership which the physician will freely give you when you deserve it. You will suddenly find that you are on the team! And when you're on that team, you're in the big league — community-wise, satisfaction-wise, and profit-wise.

If you agree, from what has already been said, that better inter-professional relations should be developed and that its development will pay off, the next question is: **JUST HOW SHOULD YOU DETAIL PHYSICIANS ON YOUR STORE AND ON YOURSELF?** There are many questions which must be answered before you embark upon a program designed to favorably influence the doctor. Perhaps we can summarize by listing a few of the more important ones.

1. ARE YOU AFRAID OF THE DOCTOR?

For some strange reason, some pharmacists approach the physician as if they were approaching the throne, or, even more abjectly, as if they were approaching the hangman's noose. Others approach the physician with an attitude of belligerence or resentment. It is perfectly true that the physician does occupy a somewhat unique position in most communities. His profession has, through hard work and excellent public relations, achieved a highly preferential position. He is respected by practically everyone, and he quite frequently enjoys both the social and financial benefits which accrue to such position. But these facts should in no way keep you from approaching him as a fellow professional man. He has equal, **but no greater**, interest in the health of the community. He has an equal concern in the maintenance of good prescription service; he knows that he must have it, if he is to succeed in his therapeutic efforts! As long as a pharmacist expresses resentment toward the medical profession, he will likely **never** succeed in achieving comparable professional position with the doctors in his town.

2. **DO YOU APPROACH HIM AS A FELLOW PROFESSIONAL MAN?** Thousands of words have been written and spoken about the necessity for the encouragement, both on the part of the pharmacist and the physician, of a feeling of teamwork and the feeling that they are fellow professional men, working in

closely allied fields. On a national scale, there is a growing spirit of confidence and co-operation between the pharmaceutical and medical associations. But your own local problem is not solved by this growing national unity. It is strictly up to you, through your knowledge of your professional business, to **deserve** such confidence on the part of the physicians in your own home community. You will be surprised, perhaps astonished, by the enthusiasm with which your offer of co-operation will be received, if the physician recognizes, in you, a fellow professional man with the proper dignity and knowledge which such status demands. If you feel that you have these qualities, I suggest you test yourself by calling on some of your doctors. You will discover that they are receptive and easy to talk with, if you know your story.

3. WHAT DO YOU TELL HIM WHEN YOU DO SEE HIM? Note I did not say "What do you ask of him." No physician likes to have someone solicit his business and his preference simply because the asker will profit from it, and neither do you. What you should tell him on your visit to his office, or on his visit to your store, is condensed in the cardinal rule of all good salesmanship—sell **service**, and an answer to **his** problems, not yours. Show him, by adequate demonstration, the service you are prepared to render—that his utilization of your store and of your professional ability will make **his** job easier, that **his** patients will receive better treatment because of you. If you can do this, you have sold him a service—you have sold him an answer to one or more of **his** problems—you have sold him on your store!

4. DOES YOUR STORE BACK UP YOUR STORY? Earlier in his talk, you will remember, something was said about your store's atmosphere and that you could not have a 45-calibre story and a 22-calibre store. You are, of course, going to invite the physician to visit your store; and certainly if he directs his patients to your store, they are going to form a quick opinion of your establishment. For these reasons, it is essential that you prepare your scenery before you put on the first act of your show. Therefore, spend some time in a coldblooded analysis of your store and its character **before** you call on any physician to develop better inter-professional relations. Remember, too, that the personnel in your

store must measure up to the picture you paint. You may personally have high professional attainment and you may impart an atmosphere of competence and confidence, but if a single one of your clerks fails to do an equal selling job in his functions, the whole setting will collapse like a stack of cards. One thing further that should probably be under his classification is the human tendency to make promises that fail to live up to them. It has often been a stumbling block in efforts to build up prescription business and professional confidence. For example, if you say to the medical profession that you will deliver prescriptions and sick-room supplies—then deliver! If you say you have a prescription item in stock—have it!

5. CAN I GET THE DOCTOR'S BUSINESS? This question, refers not to prescriptions which the doctor may write, but to his direct business—the medical supplies which he requires for his practice, the drug sundries which he and his family must purchase—all of which he **could** buy from you. What method is best to get the physician's personal business? Many stores enjoy a large volume of purchases, both for the doctor's practice and for his personal use, simply because the doctor has developed a feeling of confidence and friendship for the store and for its personnel. This is probably the very best way to develop such business—it is the most surely profitable—and is likely to be most permanent. We all know there are other methods occasionally used to get the doctor's business. Some pharmacists attempt to buy the physician's business with gifts and extra discounts, and a few even go so far as to set up a system of commissions or kickbacks on prescription business obtained. These methods may succeed for a short time. Their success, however, is usually temporary, and such methods are completely vulnerable to inroads of other merchants. Others can take such business away overnight simply by offering more elaborate gifts or bigger kickbacks. There is another objection: Such methods of getting business are properly labeled in only one way—they are "dirty" business methods! They are completely unprofessional—they violate all business ethics—and they pull down, rather than build up, confidence and co-operation between the two professions.

HOW CAN I ORGANIZE A CAMPAIGN?

A short slogan which has had wide use in the stimulation of salesman in this—Plan Your Work, Then Work Your Plan. This slogan could very well be applied to your problem and your plans for bettering inter-professional relations—particularly the first part—Plan Your Work. Just so, in planning an approach to the physician, you should analyze him. Take some time to make a careful list of all the doctors on whom you intend to call, mark down such things as their prescribing habits, their type of practice, their hospital affiliations, and any other facts which will enable you to impress the doctor with your familiarity with his preferences. Come right out and ask the physician what he wants you to carry in stock and just how he wishes you to best serve him and his patients. In doing so, you are asking his **advice** and his **help**, and the result will be that he will not only give you such advice but will think the more of you for asking. This is a point of elemental psychology to which we all respond.

HOW DO YOU GET ALONG WITH OTHER DRUGGISTS?

This question is asked because it has a tremendous bearing on your individual efforts to promote better relations with the physician. You may not think so, but it is an observed fact. You are engaged in a type of retail operation which is perhaps unique in that it has elements of professional character and elements of knock-down-and-drag-out competition. It is very easy for the retail druggist to become so engrossed in competitive efforts as to forget that the sounds of battle are acutely audible to the medical profession. The inevitable result is that they get the impression that the average retail drug store is nothing but a competitive variety store with little interest in the public health aspects of retail pharmacy. Have you ever wondered why a so-called "ethical" store can be established, and succeed, right in the center of existing drug stores whose owners have the same know-how and the same equipment, but who have, for some reason, failed to sell themselves to the physicians of their community? Have you ever asked yourself the sober question—does my personal attitude toward my profession help to build up pharmacy or run it down? If your honest answer is "no," the first thing you must do is reverse your attitude so that your face will reflect the

face of pharmacy we all want the medical profession and the public to see.

DO YOU FOLLOW UP ON DETAIL MEN?

As you all know, most pharmaceutical manufacturers employ a large staff of medical service representatives whose sole job is to promote the greater use of their products by the physician. These men, both from personal preference and as a matter of cold, practical business, prefer to co-operate with the druggist who co-operates with them. So it would pay to ask yourself this question: "Do the retail men who call on the doctors in my town like to work with me and for me?" You want to learn to do a proper job of detailing the physician. You have in the detail men who visit your store a steady and willing staff of experts who will be glad to share their technique. So, I urge that you make full use of the detail men who come into your store. Help them, and you will find your contribution will be returned manyfold.

TALK ABOUT HIM—NOT YOU! When you do call on the physicians in your town, try to sell each one on the service which you can render; try to show him how you can help **him**, not yourself; try to offer him the solution to some of **his** problems, not your own. And lastly, wherever practical, try to have something new to offer. I do not mean that you must necessarily have a new product to discuss each time, rather I refer to the necessity of your developing some new service, or an improvement on existing service, which will set your performance apart from the usual run of such available drug store practices. Make your visit and your store stand out in his mind.

WHEN YOU START—DON'T STOP. One of the cardinal rules of public relations work is that once started it must never be allowed to slow down. The momentum and the pressure must be maintained. This rule certainly applies to your efforts with the physician. Such promotion is public relations, too. You expect to remain in business for many years. Physicians, and their habits, change—just as you and yours do. You must keep up the pressure if you are to confidently expect a continuous flow of prescriptions and preference from the doctors in your town.

DOCTORS HAVE SOME PRECONCEIVED IDEAS. I know that many of you have had the same experience as I, when, in talking

with physicians, you find that a few of them have pet gripes and misconceptions regarding the practice of retail pharmacy. No doubt you will also insist that the pharmacist has some similar gripes and objections to some of the habits of a small minority of the medical profession. I suggest that we review briefly some of these objections and misconceptions. Let's set them down and see who, if either, is wrong. First, suppose we list some of the things which pharmacists object to with physicians.

Number one on such a list would probably be your objection to the physician dispensing his own medicine. As a sub-heading under this, you might list the habit of a few physicians of dispensing less expensive medication and using you only as a source for items too expensive to carry in their offices.

The second major objection might be that some physicians are too price-conscious. Under this heading might come two classifications: First, the physician who insists on telling the patient what a prescription will cost and often underestimating it, to your subsequent embarrassment; second, the rare physician who expects commissions or other unethical inducements.

A third objection might be called unreasonable service demands. Under this group certainly comes the physician who expects immediate delivery of non-emergency supplies. Another is the physician who asks you to stock quantities of a product and then fails to use the supplies in which you have invested your capital.

The fourth complaint might well be the tendency of a few dispensing physicians to permit unsupervised dispensing of medication by their office nurses or other personnel.

The fifth difficulty is the physician who tell his patient to ask, by name, for a product which you cannot legally sell without a written prescription—and who becomes angry when you refuse to do so.

There are probably other objections and complaints which you could enumerate, but now let us look on the other side of the fence. Let's list some of the major complaints of the physician concerning the pharmacist.

The first in such a list would probably be the ever-recurring objection that the pharmacist overcharges for his prescription service. It is not my intention in this discussion

to go into this subject in detail, but we all must agree that this is an often-voiced objection on the part of the doctor. It is also easiest one to overcome, if you will discuss this question frankly with him and explain your price policy—with facts, but without apology.

The second major objection from the physician is that some druggists seem to be much more interested in merchandising than they are in professional activities. Most retail stores must handle sundries if they are to continue to exist, but over-emphasis on these sidelines to the detriment of professional activities can only elicit deserved medical criticism.

The third objection the physician often voices is that of counter-prescribing and its companion evils of unauthorized and promiscuous refilling of prescriptions.

The fourth objection, one which I am happy to report is becoming less and less important, is that of substitution and switching. Most pharmacists have found that both practices are not only unethical but unprofitable.

The fifth in this list might incorporate objections, such as, sloppy prescription filling, discussion of symptoms with the patient, and playing favorites among the medical profession. No doubt, in this list, as with the other, you could add many more you have encountered.

NOW LET'S SUMMARIZE! We have discussed some of the pet complaints and irritations of both groups. Let's look at the two lists side by side. When you do this, it is immediately apparent that the objections of one group almost exactly match the objections of the other. You will also see that all of these objections will cancel each other out:

1. **You don't like the doctor to dispense—he doesn't like you to counter-prescribe.**
2. **You don't like the doctor to dictate the price you are to charge for prescriptions—he doesn't like you to overcharge for medicine.**
3. **You don't like the unsupervised handout of medicine by the doctor's office nurse—the doctor doesn't like the emphasis on merchandising in some drug stores.**
4. **You don't like the doctor to have his patients ask for prescription items over the counter—he doesn't like you to substitute or switch his patient to one of your pet products.**

5. **You don't like the doctor to insist on unreasonable service—he doesn't like your discussion of symptoms with patients or sloppy prescription filling.**

And so it goes—each objection almost matched by one on the other side. Isn't it obvious that the solution to these problems and the answer to the question of how to improve inter-professional relations requires nothing but a little more mutual understanding, a little more give and take, and a little more willingness to sit down together and talk it over? But the two of you will never get together unless **you** really try.

Let's start co-operating instead of colliding! Let's quit bumping heads and start getting our heads together! Let's work to develop a team—a Health Service Team—unbeatable because each member contributes equally and wholeheartedly—unbeatable because all contribute to better health service for your community.

NEWS ITEMS FROM THE SECRETARY'S OFFICE

The **Peterson Drug** at Hot Springs has been purchased by **Pharmacist Frank L. Base**. Mr. Base was graduated from the Division of Pharmacy at South Dakota State College in 1948 and prior to March 1st he was employed at the **Lehr Drug** in Rapid City. For a short time, Mr. Base was on the road as service representative for **Eli Lilly**. Mr. J. C. Petersen is retiring but plans to attend the S. D. Ph.A. convention in June.

A drug store has been re-established at Fort Pierre. **Mr. Charles Frazier**, a retired rancher, is the owner of the merchandise and fixtures and he has engaged **Pharmacist, Lawrence J. Jackson**, to have complete charge of the business under the name of **Fort Pierre Drug Store**.

Pharmacist Clarence O. Engman, formerly of Hot Springs, New Mexico, has been granted a permit to conduct the **C. E. Hilton** store in Hartford as a registered pharmacy. Mr. Engman planned to do some relief work for **Neil Fuller** at Chamberlain while he was waiting for a house to be vacated in Hartford, so that he could move his family there.

C. L. (Roy) Doherty made a recent trip to Washington, D. C. where he attended a meeting of the National Public Utilities Commissioners. Roy has been invited to be Master of

Ceremonies at the Pharmaceutical Association Banquet to be held in Sioux Falls, in June.

Local Secretary, Carl Anderson, informs us that **Dr. Earl R. Serles** has accepted his invitation to speak at the Sioux Falls convention. Dean Serles will be on the program, Wednesday forenoon, June 14th, after which he will leave immediately for the University of Illinois for graduation of his senior pharmacy students. Let's give the "Dean" a one hundred per cent turn-out for his special effort to be with us this year.

Thomas P. Mills started work with the **Dow Drug Company**, Sioux Falls on March 1st. His family will remain in Huron until the new home he purchased in Sioux Falls is completed. Mr. Mills and his wife, Marie, were formerly employed as pharmacists with the **Wheeler Drug Store** in Huron.

The Executive Committee of the S. D. Ph.A. met in Huron on February 5th and elected **Harold L. Tisher** as delegate to the American Pharmaceutical Association Convention and the United States Pharmacopoeial Convention to be held in Atlantic City and Washington, D. C. Harold will also represent the South Dakota Board of Pharmacy at the annual meeting of the National Association of Boards of Pharmacy which meeting will be held in conjunction with the A.Ph.A. convention.

Dean LeBlanc has sent a program of the Pharmaceutical Institute to all South Dakota Drug Stores. Be sure to be in Brookings on April 3, 4, 5, or drive in for a morning or afternoon session if you cannot be absent from your pharmacy for all of the three days. It will be well worth your while to drive in for any session.

It is not too early to write for reservations for the Pharmaceutical Association Convention to be held in Sioux Falls on June 13, 14, 15. Address: **Carl Anderson**, Local Secretary, 814 South Covell Avenue, Sioux Falls, S. Dak. Don't Delay!

State Pharmaceutical Convention
Sioux Falls
June 14, 15, 16

CLINICAL TESTS PROVE CHLOR-TRIMETON MOST POTENT ANTIHISTAMINE

St. Louis, Jan. 16—The American College of Allergy received first conclusive clinical evidence today that Chlor-Trimeton, a recently perfected anti-histamine drug, is as much as 25 times more powerful than most anti-histamines in general use to combat colds and allergies.

Dr. G. Everett Gaillard, White Plains, N. Y., allergist, told the 6th annual meeting of the group in the Jefferson Hotel here that Chlor-Trimeton in total daily amounts of as little as 2 milligrams achieved good-to-complete relief for 86% of hay fever patients. Other anti-histamines generally are prescribed in daily dosages of 50 to 200 milligrams.

The secret of Chlor-Trimeton's potency is the exchange of one hydrogen atom for an atom of chlorine, Dr. Richard Tislow, director of biological research laboratories of the Schering Corporation, Bloomfield, N. J., pharmaceutical manufacturers, revealed at the recent annual meeting of the American Association for the Advancement of Science in New York.

Chlor-Trimeton is the active anti-histamine ingredient, in a 2-mg. amount, in Coricidin tablets doctors prescribe to stop common cold symptoms. In Coricidin, available only by prescription, the potent anti-histamine is combined with aspirin, phenacetin and caffeine to ease pain, counteract fever and provide a mild stimulant.

Dr. Gaillard reported that of 332 patients receiving Chlor-Trimeton in total daily dosages ranging from 1 to 8 milligrams, only 1% noted side-actions like drowsiness or headaches in any intensity, although slight temporary effects were recorded in 12% of the cases.

"Chlor-Trimeton maleate is a highly effective therapeutic agent especially useful for the symptomatic relief of hay fever alone or accompanied by other allergic manifestations," Dr. Gaillard summarized.

"It is effective in a dose of 2 to 4 milligrams total intake daily. Results with the smaller dose appear to be slightly superior in hay fever, asthma and vasomotor rhinitis."

"Chlor-Trimeton maleate possesses an extremely low toxicity and is likely to cause no more than 1% severe side reactions."

The original anti-histamine developed at Schering's laboratories, propenpyridamine, (1-phenyl-1-(2-pyridyl)-3-dimethylaminopropane), is effective in doses of as little as 10 milligrams in blocking effects of bodily histamine and relieving cold symptoms.

Dr. Dominic Papa and Dr. Nathan Sperber, of the Schering staff, ingeniously devised the method of replacing a hydrogen atom with a chlorine atom, with the results that the therapeutic index, or margin of safety in effective therapeutic dosage, of the resulting Chlor-Trimeton compound was increased from 175 to 2,500.

ABERDEEN PHARMACISTS PLAN DISTRICT ORGANIZATION

Albert O. Bittner has announced plans to organize an Aberdeen District Pharmaceutical Society. At a recent noon luncheon, a committee was chosen by a group of Aberdeen druggists to do the work of nominating a slate of officers and obtaining a list of persons willing to be members of the local society. Persons invited to be members will include all managers or drug store owners, pharmacists and other employees, representative salesmen of the various pharmaceutical houses who travel in this area and employees of the local wholesale drug company.

The first meeting to be held in the early part of March will start off with an evening dinner to be followed by an hour's educational program and one or more hours of social entertainment. The membership fees is temporarily agreed upon to be \$5.00 for pharmacies and \$1.00 for individuals. Pharmacists in the nearby towns will be invited to join in this district society.

ALVIN E. OLSON DIES

Pharmacist, Alvin E. Olson, (44) died February 14th at the Britton hospital after a short illness with virus pneumonia. His death occurred only a short time after he had decided to close his drug store in Claremont where he had been in business for the past ten years. Mr. Olson was a life-long resident of Claremont and succeeded his father Charles A. Olson in the drug business there. He was an active civic leader as a former member of the Claremont town board, former mayor, former assessor and an officer of the

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Newer Therapeutic Agents

by Edgar Parry, Instructor in Pharmacy
South Dakota State College

ANTIHISTAMINE COLD TABLETS AND THE COMMON COLD

During the war years, extensive research was carried out to determine how we "catch" a cold, and to learn more about the action of the cold virus in the body. Since no animal will contract the common cold except the chimpanzee, which is too expensive for use as a laboratory animal, the experiments were conducted on human volunteers.¹ The virus cannot be grown artificial media or in fertile eggs, so the causative agent was transferred from human "donors" who were in the early clinical stage of the disease.

It was found that only sixty percent of the volunteers developed colds when infected intranasally from the discharge of these donors. The remaining forty percent successfully combatted the virus and had no colds, even though the dose was many times larger than that necessary to cause infection. Moreover, the immunity established by previous colds or from antiviral cold antibodies either does not exist, or is too short to be of any consequence. The amount of exposure to the virus necessary for contracting the cold varies both with the individual and within the individual.

Coughing, sneezing, and nose blowing were responsible for infecting a large number of volunteers, but the handkerchief proved to be as great a speaker. Experiments proved that shaking the hand of an individual who has just blown his nose into a handkerchief, handling a handkerchief—even being downwind from it when it's shaken — means that you have definitely come in contact with the cold virus. The spray from the mouth when speaking carries it.

It is probable the virus is harbored by healthy persons, but will disappear unless some physical "injury" such as a sudden change of temperature, a draft, or some weakening factor creates conditions in the nasal mucosa favorable to the virus. Pneumococci and other bacteria may make a mild attack on the mucosa and open the way for the cold

virus infection. However, cold vaccines have not proven of general benefit.

In 1947, J. M. Brewster, a navy doctor, while treating an allergic patient with an antihistamine, discovered that the patient had contracted a cold but that it was quickly aborted.² It was also known that histamine could be found in the nasal discharge of persons with a cold, and since the symptoms of hay fever are so closely akin to those of the common cold, Brewster experimented to find out what effect the antihistamines would have on the cold.

He treated 572 common-cold patients with an antihistamine. Of those patients, on whom the antihistamine therapy was started within the first hour after appearance of symptoms, 90 percent were "cured" and the cold aborted.³ When 2, 6, and 12 hours had elapsed after onset, 87, 74, and 70 percent were cured. When therapy was instituted too late to abort the cold, it lasted only 3 to 5 days and symptoms remained mild. By onset was meant the first sensation of soreness in the throat or nasal passage, or whether an individual has learned by experience to be the symptom of a cold. To be "cured" a patient must have all signs and symptoms disappear within 24 hours and remain absent for at least 48 hours.

Brewster explained his results by theorizing the mechanism of the cold. First, the cold virus must be present, then a "trigger mechanism" such as fatigue, chilling, inhaling irritants, etc., must occur. This mechanism causes an allergy-like reaction which produces an edema of the mucosa and subsequent drainage. The mucous loses its normal protective power; the cold virus becomes active, increasing drainage and wear on the mucosa; and finally secondary infections set in. The effect of the antihistamine is to prevent histamine from causing the edema of the mucosa. This keeps the protective power of the mucous intact and prevents infiltration of the cold virus and secondary infections. The antihistamine must be given in the first phases of the cold, for once the mucosa is damaged

they are useless in preventing infection.

The main action of the antihistamine is to eliminate serous discharge from mucosa, and by eliminating post nasal dripping, the cough reflex is inhibited. It is claimed by drug companies that in later stages of the cold, aspirin and acetophenetidin provide synergistic activity to the antihistamine and enhance the effect of treatment. Another argument for their use is that "cures" are not limited to persons known to have an allergy. The advantages of using these cold tablets are also the obvious ones. Drugs which irritate and shrink the mucosa are avoided. Factors such as coughing, sneezing, and nose blowing, which are responsible for spread of colds are eliminated or greatly reduced. Brewster found a higher percentage of cures from antihistamines than from a combination of codeine sulfate and papaverine hydrochloride, which is supposedly a preferred cold remedy.

The side reactions of the antihistamines remain a constant hazard. Drowsiness in particular presents a danger to the industrial worker, the car driver, to persons engaged in many ordinary occupations. People who purchase the tablets should be warned of this and all possible side reactions. However, with the number of different antihistaminic cold tablets on the market to choose from, there is a good chance there will be one which will have no side effects on the patient.

These cold tablets may be taken twice daily as a prophylactic, but this would appear to present no special advantage. Theoretically, the cold is aborted when the tablet is taken after first symptoms appear.

We know they are not the "sure-cure" for the common cold, but the logic of using their therapeutic activity in combatting the cold seems sound. If the public is taught not to expect miracles from them (which is what some of the advertising would have us believe), then the pharmacist and doctor need not feel apologetic for them. If they reduce the incidence of colds by only fifty percent, they certainly are worth while.

REFERENCES

1. Pulse of Pharmacy, Wyeth Corp. November-December 1949.
2. Brewster, J. M.: U. S. Nav. M. Bull. 47:810 (1947).
3. Brewster, J. M.: U. S. Nav. M. Bull. 49:1 (1949).

NEWS

Work has started on the comprehensive survey of drug store operations under the sponsorship of The National Association of Retail Druggists.

The general objectives of the survey, which is to cost \$150,000, are twofold: To provide the industry with complete statistics of store-wide and departmental gross margin and overhead costs, and to help the retail drug store to serve the community through improved distributive facilities.

The National Association of Retail Druggists has contributed \$25,000 to the survey fund, the wholesalers \$25,000, and contributions are being made by manufacturers to attain their quota of \$100,000.

At a meeting of the Policy Committee of the N.A.R.D. Committee on Retail Drug Store Handling Costs, held February 1 in the office of John W. Dargavel, executive secretary of the N.A.R.D. and general chairman of the project, twelve test stores were selected for the study, and the Policy Committee proposed that the number be increased to sixteen. Frank W. Moudry, president of the N.A.R.D., presided as chairman of the meeting of the Policy Committee.

Of the 12 test stores two will be in Philadelphia, two in Ohio, two in Tennessee, one in Minnesota, two in California, two in Texas, and one in northern New Jersey (in the New York area).

The director of the survey, Dr. Orin E. Burley, professor of marketing of the Wharton School of Finance and Commerce of the University of Pennsylvania, said drug store operation for purposes of the survey would be broken down into 12 departments. He named the commodity groups under each department listed. The general pattern of breakdown of departments was approved.

The subcommittee on store selection reported that two of the test stores would be in suburban or small village areas of less than 2,500 population; five others in small towns of less than 50,000, and five in cities of 50,000 or more, two of the last-named group possibly in downtown areas and three in neighborhoods.

Store volumes of the test stores were to range as follows: two large stores of \$200,000 minimum annual volume; one store of between \$100,000 and \$150,000 volume; eight medium-size stores of volume ranging from

\$40,000 to \$75,000, with the majority around \$60,000; and one small store in the \$30,000 to \$40,000 range of volume. Up to four stores might be without fountain. Stores selling liquor would be excluded.

A restatement of store selection procedure for other area supervisors is being made and details of the store study procedure are now in work.

Groupings to date of departments and commodities include the following: Packaged Medicines, doing an estimated 15.66 per cent of drug store sales; Other Proprietaries, 4.24 per cent; Toiletries, 10.61 per cent; Sundries, 17.08 per cent; Prescription, 14.76 per cent; Confectionery, 5.23 per cent; Tobacco Products and Supplies, 11.40 per cent; Magazines, Newspapers and Books, 3.32 per cent; and Fountain, 17.70 per cent.

Commodities listed in the Packaged Medicines group were vitamin concentrates, laxatives and cathartics, headache remedies, cough and cold remedies, tonics, antacids, salves and ointments, and all other packaged proprietaries. Under the Other Proprietaries grouping were feminine hygiene medicaments, jellies and diaphragms, baby foods, animal and plant health products, home sanitation and household products.

The Toiletries group included cosmetics, hair products (exclusive of combs, brushes, nets, curlers, etc.), oral hygiene products (exclusive of tooth brushes and floss), shaving products (exclusive of razors, blades, straps, etc.), hand products and personal cleanliness (exclusive of cleaning tissues, toilet tissues and manicure implements), and miscellaneous toiletries including baby powder, cream, etc.

Under Sundries were grouped first aid good, sick room medicinal and surgical supplies, photographic products, photo finishing, stationery and writing items, greeting and picture post cards, toilet sundries (including razors, blades, tooth brushes, hair brushes, combs, hair nets, manicure implements, etc.), baby sundries (including nipples, bottles, pacifiers, scales), sanitary napkins, toilet tissue, cleansing tissue, etc., electrical appliances, jewelry, and all other sundries.

The Prescription group took in compounded prescriptions, packaged specialties, antibiotics, allergens, vaccines and biologicals (ampoules), vaccines and biologicals (vials), prescription vitamins, (tablets, capsules,

liquids, etc.), narcotics, and miscellaneous prescription items.

The Confectionery group had box, bar, bag and bulk candy, gums and cough drops (medicated and non-medicated), nuts, and all other confectionery items.

Tobacco products and supplies included cigarettes and matches, cigars, tobacco and snuff, and smoking sundries.

Under magazines, newspapers and books were included daily and Sunday newspapers, weekly, bi-weekly, semiweekly and monthly magazines, comics, books including pocket books, and rental library.

The objectives of the survey fall into six groups, as follows:

(1) To obtain storewide retail drug store gross margin and overhead costs data.

(2) To procure departmental gross margin and overhead costs data in the departments as follows: (a) Prescription; (b) proprietaries, packaged medicines, (c) sundries, (d) toiletries, (e) tobacco (cigarettes, cigars, pipe tobacco, snuff, etc.), (f) confections (box candy, candy bars and mints, gum, etc.), (g) periodicals (magazines and newspapers), (h) fountain, and (i) other income.

(3) To gather "commodity group" gross margin and overhead costs breakdowns.

(4) To attain overhead costs in selected departments by a "natural" and a "functional" assignment of costs.

(5) To obtain the above gross margin and overhead costs data (all to be related to a net profit conclusion).

(6) To procure additional information of a byproduct nature, store traffic, etc., for service to the community of location through better distributive facilities.

FAIR TRADE HAILED AS BULWARK AGAINST GROWTH OF MONOPOLY

Providence, R. I. — (Special) — Voluntary Fair Trade laws benefit American business by serving as one of the country's most effective bulwarks against the growth of monopoly, members of the Providence Exchange Club were told here Thursday, January 19, at a luncheon meeting.

The statement was made by Basil J. Mig-nacca, professor of Pharmacy at the Rhode Island College of Pharmacy and president of the Eden Laboratories in Cranston. His dis-

cussion of "Fair Trade and The Businessman" was a feature of the current state-wide experimental campaign to inform industry, labor and women's groups on the purpose of voluntary Fair Trade. The campaign is being conducted by the Bureau of Education on Fair Trade in cooperation with the Rhode Island Pharmaceutical Association.

"Voluntary Fair Trade makes it possible to keep free enterprise really free and really enterprising," Professor Mignacca said. "By restraining such monopolistic practices as deliberate operations in the red to destroy business competitors, the Fair Trade laws promote far play in the market-place and honest competition.

"Without Fair Trade, small and medium-sized retailers would be forced to the wall in unequal price wars with would-be monopolists," he pointed out. "American business, as a whole, stands to lose if the power of dollars alone is permitted to destroy efficient retail outlets."

Retailers, large, medium and small, are indispensable in maintaining the mass distribution system which enables manufacturers to pass on to consumers the economies of mass production techniques, according to Professor Mignacca. By helping to maintain this mass distribution system, Fair Trade is of direct benefit to all industry, including those who Fair-Trade their products and those who do not, he added.

Basic anti-monopoly provisions are incorporated in the voluntary Fair Trade laws now in effect in 45 out of 48 states and in the Federal Miller-Tydings Act, Professor Mignacca stressed. "As a part of our anti-trust structure, these Fair Trade laws prohibit any agreements among manufacturers to set prices or restrain competition. Nor is any manufacturer permitted to put a trade-marked product on Fair Trade unless that product is in free and open competition with similar products produced by others."

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Sand Lake Baseball League. He is survived by his mother and six brothers and sisters including Mrs. Thomas Haggard of Watertown.

PHARMACY SERVICE FOR VETERANS

The nation's retail pharmacists filled 641,000 prescriptions for veterans under the Veterans Administration "home town" pharmacy program during 1949. E. Burns Geiger, chief of V-A's pharmacy division, announced today.

The 641,000 prescriptions compounded represented an increase of 141,000 over the approximately half million filed in 1948.

During the last three months of 1949, privately owned pharmacies filled 175,000 prescriptions — an all-time high for any three month period.

Under agreements between V-A and State Pharmaceutical Associations in 44 states, the District of Columbia and Hawaii, private pharmacists have been authorized to fill prescriptions, at Government expense, for veterans undergoing out-patient treatment for service-connected ailments in V-A clinics or with private physicians.

In addition to prescriptions filled by private druggists, a total of 3,273,000 were filled during 1949 by the 262 pharmacists in V-A hospitals and centers, and another 1,103,000 were filled by 112 pharmacists in V-A regional offices.

Also, in 1949 V-A pharmacies supplies large quantities of routine medications to wards and clinics of surgical and medical services in the hospitals.

During the past year, Mr. Geiger said, V-A reorganized the pharmacy division in the Central Office in Washington, D. C., in order to assure patients in V-A hospitals, centers and regional offices of the best pharmaceutical service.

Technical, training and operations sections were created. They were made necessary, Mr. Geiger explained, by the recent elimination of V-A branch offices and the assumption in Central Office of supervision of many field activities.

The technical section reviews and makes recommendations on requests for new drugs; informs V-A pharmacists throughout the country of new drug therapy and other technical developments, and maintains contact with other Government agencies and with pharmaceutical manufacturers.

The training section is charged with developing educational programs to maintain

professional qualifications, skills and abilities of V-A pharmacists.

The operations section is responsible for developing procedures, techniques and standards for the purpose of insuring efficient and economical operations and management of all V-A pharmacies.

PHARMACISTS SHOULD PREPARE FOR U.S.P. CONVENTION

Washington, D. C. (Feb. 21) — In an editorial appearing in the February issue of the **Practical Pharmacy Edition** of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, Dr. Robert P. Fischelis, secretary of the Association, reviews the structure of the 1950 meeting of the U.S.P. Convention which is to be held in Washington, D. C., on May 9. He also calls attention to the importance of the selection by American Pharmacy of "its strongest and most capable representatives" to both the Revision Committee and the Board of Trustees of the U.S.P.

"Every ten years," Dr. Fischelis states, "medicine and pharmacy unite in preparing for the production of a new U.S.P. It has become a book of standards for drugs of proven value and is an official compendium under Federal and State Food, Drug and Cosmetic Laws. The partnership of pharmacy and medicine in this venture demands leadership in scientific and professional practice. Pharmacy must take stock at once of the abilities of its outstanding professional personnel to make a worthwhile contribution to this cause and then get behind the men who are nominated to make sure they are elected.

"This is not a responsibility to be left to others. It is one which pharmacists must accept if the Pharmacopoeia is to reflect modern pharmaceutical practice."

The details of the procedure to be followed in carrying on the business of the Convention are given in the proposed revised Constitution and By-Laws of the Convention, which will be presented for adoption at Washington on May 9.

In order that A.Ph.A. members may be fully informed of the proposed revised Constitution and By-Laws, both are printed in full in the February issue of the **Scientific Edition** of the JOURNAL OF THE AMER-

ICAN PHARMACEUTICAL ASSOCIATION. Delegates to the Convention, in particular, should be aware of the proposed changes.

NATIONAL PHARMACY WEEK SCHEDULED OCTOBER 29 TO NOV. 4

Washington, D. C. (Feb. 21) — This year National Pharmacy Week will be observed from October 29 to November 4. These dates were approved by the Council of the American Pharmaceutical Association at its January meeting, and are announced in the February issue of the **Practical Pharmacy Edition** of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

The dates supersede the previous tentative dates, October 15 to 21, which were cancelled because of conflicts with other important events scheduled at that time.

Previous to the meeting of the Council, the Public Relations Committee of the Association, under whose direction the event is conducted, had requested that a late fall date be selected for two principal reasons:

1. The success of the observance of National Pharmacy Week depends to a considerable extent upon the activities of the state pharmaceutical associations. It is believed by the Public Relations Committee that since all state association conventions will have been concluded by the latter part of October, an opportunity will have been afforded for a discussion of National Pharmacy Week plans at each state meeting.

2. Selection of a late October date will enable the pharmacy schools of the nation, together with the A.Ph.A. student branches, to participate more actively in the Week. An earlier fall date would necessarily have conflicted with new term enrollment at the schools.

Identified with Public Health Promotion

Tentative plans of the A.Ph.A. Public Relations Committee, according to Chairman Tom D. Rowe, indicate that the 1950 observance of National Pharmacy Week will feature the pharmacist as a community health builder using the educational program of the American Heart Association as an example of the pharmacist's helpful participation.

"The Public Relations Committee has recommended," Chairman Rowe stated, "that the general theme of the annual program be so worded and executed as to emphasize to

the public the professional nature and status of pharmacy in the United States. National Pharmacy Week observance for 1947, 1948, and 1949 has clearly demonstrated that dedication of the Week to a major health program has focused attention of pharmacists and the public on the professional aspects of the drugstore to a greater extent than ever before."

Other members of the A.Ph.A. Public Relations Committee are: Walter M. Chase, Detroit, Mich.; Robert P. Fischelis, Washington, D. C.; Jean Henderson, Jacksonville, Fla.; Bert R. Mull, Indianapolis, Ind.; and Harold V. Darnell, Washington, D. C., secretary of the Committee.

HEALTH INFORMATION FOUNDATION

According to John W. Dargavel, executive secretary of the National Association of Retail Druggists, in his editorial message in the March 6 issue of the N.A.R.D. Journal, "The drug and allied industries have joined to establish an organization that is certain to make numerous important contributions to the general welfare. It is the Health Information Foundation announced on February 7."

Mr. Dargavel goes on to say:

"The Health Information Foundation is the outgrowth of opinions many people share in connection with the extensive agitation for the adoption of socialized medicine in the United States. Here are some of them:

"The available information on public health is meager and it fails to present an accurate picture of conditions nationwide. Figures often cited are guesses and they have induced erroneous conclusions. Most of the facts used pro and con in the discussions on socialized medicine are such that it is easy to distort the varied stories they relate. The results have been compounded confusion.

"The people know little about the remarkable achievements of medical science in America. It has become necessary to enlighten the public in order to insure the freedom it is vital to have to make further progress possible. Misguided agitation aimed to create support for socialized medicine minimizes the reasons for the advancement of medical science in the United States.

"Negative attitudes toward existent health problems are subversive. They tend to ob-

struct solutions and thus they give effective arguments to the advocates of socialized medicine. It is unwise to follow the notion that none of the conditions associated with public health is serious or that it is the exclusive prerogative of the physicians to determine the solutions for existent health problems.

"The Health Information Foundation was formed after many months of deep study and penetrative discussions. It was made plain that there was an urgent need for an independent organization with the primary objective to bring about adequate distribution of the facilities of medical science. The conclusions also involved the conditions responsible for the extensive agitation in support of socialized medicine in America.

"I am in accord with the purposes of the Health Information Foundation. It is a constructive nonpolitical organization founded to serve for the betterment of public health. I am proud to be identified with it as a director and a member of the executive committee."

3 SPOKESMEN AGREE ANTI-HISTAMINES OK IN COLD TREATMENT

New York, Jan. 2 — Anti-histamine compounds have a legitimate place in the treatment of the common cold, a government official, a leading cold-stopper manufacturer, and a National Better Business Bureau spokesman agreed today.

Measures taken in advance or release of the new cold tablets for sale without prescription, it was pointed out, included evaluation of research data establishing therapeutic and non-toxic characteristics of the drugs, and label statements as to contents, dosage and symptoms to be treated.

Dr. E. E. Nelson, head of the New Drugs Division of the Food and Drug Administration in Washington, said of the anti-histamine cold tablets:

"The New Drugs Division reviews the findings of experts in medicine, pharmacology and chemistry resulting from their testing of new drugs.

"When we permit sale of a drug it simply means we find no reason to believe it is not safe when taken in accordance with directions on the label, for the specific ailment described on the label.

"Our view has been consistently that they could be legitimately recommended for relief of symptoms, and that label claims should be limited to relief of symptoms only."

The manufacturer must demonstrate a drug's safety and effectiveness in the directed dosage and decide whether to include a caution on the label for the occasional user who may not respond or may experience other mild effects, Dr. Nelson said.

"There is a cumulative record of more than 10,000 cases in which doctors report that various anti-histamines have successfully stopped colds in from 70 to 90 percent of cases, depending upon the speed in using the drugs after first symptoms appeared," said Elliott A. Bowles, president, Union Pharmaceutical Co., Montclair, N. J., manufacturer of Inhiston anti-histamines.

"A few of the early anti-histamine drugs, in testing, produced side effects such as dizziness in some patients. Others, more recently introduced, have been fortunate in avoiding these side actions.

"Drugs in dosages as low as 10 milligrams per tablet have been perfected, and it is these that now are offered for sale without prescription. Inhiston is such a product, and it has successfully demonstrated its effectiveness and margin of safety at the directed dosage levels.

"Obviously, the lower the effective dosage per tablet, the wider the margin of safety. Since all people do not react the same way to any drug, however, the manufacturer owes it to the public to include a label caution about possible side actions."

In a report to newspapers and other advertising media, Allen E. Backman, editor of "Do's and Don'ts in Advertising" and spokesman for the National Better Business Bureau, said:

"Scientific information available indicates these drugs have a legitimate place in cold therapy.

"The net impression from (published clinical reports) is that a number of investigators . . . have reached the conclusion that, in the case of many colds, if therapy with anti-histamines drugs is begun immediately when the first symptoms appear, the symptoms may be suppressed and for all practical purposes the colds absorbed.

"None of the drugs has been found effective

for all cold sufferers. National Better Business Bureau recommends that (advertising) copy make it clear that the product is recommended for 'head colds.'"

STUDIES BY 11 DOCTORS SHOW ANTI-HISTAMINICS AID 85% OF 6776 COLDS

New York, Feb. 25 — A summary of cold control research by 11 physicians showed today that among 6,776 patients with colds and cold symptoms in experimental tests published to date in medical journals, 85% benefited when given treatment with anti-histamine compounds.

The research summary adds 4,419 cases to the 2,357 covered in a review of anti-histamines in cold therapy in today's Journal of the American Medical Association.

Of the 6,776 patients in the summary, 2,378 were treated in three projects by Capt. John M. Brewster, U. S. Navy Medical Corps; 1,745 by Dr. H. E. Tebrock in an eastern industrial plant; 1,000 by Dr. M. M. Kessler in another eastern factory; 500 by Dr. J. S. Gordon in a southern college; 494 by Dr. H. G. Murray in a New England factory; 404 by Drs. J. J. Arminio and C. C. Sweet in an eastern penitentiary, seminary and convent; 92 were studied by Drs. W. F. Philips and W. I. Fishbein, and 63 by Drs. J. W. Middleton and J. A. Rider.

Additional studies now under way at Great Lakes Naval Station, colleges, institutions and industrial plants, will shortly bring to more than 10,000 the number of cold victims that have been studied by physicians in controlled anti-histamine cold research. Analysis of preliminary results in some of these studies, it is reported by doctors conducting them, duplicates the summary average showing stopping of colds and cold symptoms in 85 cases out of every 100.

Addition of these thousands of new cases to those reviewed by the Council on Pharmacy and Chemistry of the American Medical Association, according to anti-histamine manufacturers, should do a great deal to answer questions on the effectiveness of the anti-histamines in cold treatment, and their safety in the low-milligram dosage recommended on labels of anti-histamines available without prescription.

In its review of 2,357 of the 6,776 cases ap-

pearing in the summary, the A.M.A. Council complained that diagnostic methods employed by the doctors directing the projects did not conclusively demonstrate that the condition treated was the common cold. The Council said "the patient may have been mistaken in his belief that he was getting a cold."

The Council said, however, that "the anti-histaminic agents apparently produce considerable subjective relief owing to inhibition of nasal discharge."

The Council's critique recommended refinement of cold research techniques to include isolation of a cold-producing organism with which to inoculate patients, who would be treated with anti-histamines before and after inoculation, with a control group receiving only inert or useless tablets.

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Ineffective because small or "minimal" additions to the diet may spoil the entire therapeutic result; dangerous because a strict observance of the diet may lead to a deficiency of vitally important elements unless care is taken that the equilibrium between intake and loss of these substances is maintained.

Experience has taught the author that not only can so-called benign hypertensive vascular disease be effectively treated when critical complications are present but also that malignant hypertension, in spite of advanced complications may either be changed into the benign form of hypertension or made to disappear completely. The important result is not that the change in the course has been effected by the rice diet, but that the course of the disease can be changed.

Dangers of Ergotamine Injection

Ergotamine, administered so often for migraine headache, may cause angina pectoris and even death. It may act on the coronary arteries or myocardium.

*Edited by Don H. Manning, M.D.

(Continued from Page 79)

eral Hospital has a bed capacity of 629. Its connection with the University of Minnesota Medical School enables its staff to keep well informed of the most recent trends in the several fields of medicine.

C. Eleven weeks of vacation are allowed during the three years.

D. Twenty-eight days of illness time are allowed.

APPLICATION FOR ADMISSION

Applications for admission to the School should be made by writing to the Director of the School of Nursing, Minneapolis General Hospital, Minneapolis, 15, Minnesota. Blanks will be sent and plans for personal interview, physical examination, and nursing aptitude tests will then be made.

DATE OF ADMISSION

A. September 25, 1950.

B. Registration will be on or about September 22, 1950.

DID YOU KNOW THAT:

1. The Minneapolis General Hospital School of Nursing ranks in the upper 25% of all schools of nursing in the United States, according to a classification of the National Accrediting Service. This report is summarized in the American Journal of Nursing for November 1949.
2. The 10,000 patients admitted to the Minneapolis General Hospital each year provide a rich and varied source of clinical teaching opportunities.
3. The curriculum of the Minneapolis General Hospital School of Nursing provides for a concurrent program of theoretical and clinical experience.
4. The affiliation at Miller Hospital in St. Paul, Minnesota provides experience in a private hospital and a rural hospital experience is included to give the student an understanding of the rural community.
5. We have a scholarship fund for students who have nursing ability and loan funds for students with ability who need assistance.
6. The Minneapolis General Hospital School of Nursing students, under the direction of two social directors, are provided with opportunities that contribute to a well rounded personality such as:
 - a. Interdenominational Bible Study Groups.
 - b. Chorus.
 - c. Handicrafts.
 - Basketball, Golf, Horseback riding, Baseball, Bowling, Swimming, etc.
 - e. Numerous Social Activities.

AUXILIARY ACTIVITIES

AUXILIARY NOTES

Preparations are under way for our State Convention to be held in Mitchell May 21, 22, 23. Why not start making your plans now to attend? On February 6th I visited the Sixth District, Mitchell, South Dakota, to help formulate plans for the Convention. They promise to be interesting as well as entertaining.

At this meeting Your President spoke to the group about Socialized Medicine and the threat of complete socialism. She also explained the Senate Bills Numbers 1453—**Federal Aid to Medical Schools, 6000—Changes in the Social Security set up** and 1411—**Federal Aid to Medical Education.**

After the meeting a very lovely evening was spent at Mrs. J. H. Lloyd's home. The hospitality of District Six was certainly appreciated as the Officers and Members did everything possible to make my visit an enjoyable one.

* * * *

It still isn't too late to get your subscriptions in for Hygeia and the Bulletin.

* * * *

It is gratifying to hear how busy the South Dakota Auxiliaries are. They have sponsored the following projects:

- Benevolent fund
- Cancer Control
- Supporting Crippled Childrens State Hospital
- Nurse Recruitment
- Hospital Auxiliaries
- Health Education Day Programs
- Rural Health Program
- Voluntary and Prepayment Medical and Hospital Care plans
- Studying Health and Medicine Legislation
- Twelve Point Program of A.M.A.

From the reports coming in from my Officers, Standing Committees and the Districts, I feel that every member is being an "Active Member."

Mrs. William Sercl, President

AUXILIARY P. R. HEAD ON ANNUAL PROGRAM

Mrs. Paul Craig, National Director of Public Relations for the Auxiliary to the American Medical Association, will be the honored guest of the Auxiliary to the South Dakota State Medical Association at its Annual Meeting in Mitchell, May 21, 22 and 23. Mrs. Craig will speak to the group on the field of the Auxiliary in "Medical Public Relations" and will also give a brief presentation on the subject on the program of the Medical Association.

Mrs. Craig is widely known for her public relations activities and for the setting up of a national program for the doctors wives to work on.

HAVE YOU READ?

"The Doctor Brushed off Utopia" by Henry La Crossitt, in *Colliers* for February 11th 1950.

"The Road Ahead" by John T. Flynn.

REGISTER NOW!

Annual Meeting

Mitchell

May 21, 22, 23

Widman Hotel

Lawler Hotel

Roberts Hotel

Flamingo Court

Resume of Treatment of Carcinoma of the Cervix

C. S. Larson, M.D., Sioux Falls, S. D.

Early in the treatment of carcinoma of the cervix, surgery offered the only means of attack. With the advent of radium, the use of this substance increased the survival rates considerably. These rates were raised again by the introduction of x-rays and the development of modern shock-proof, high voltage equipment. Recently Meigs of Boston has reported a series of patients in which surgical removal of the cancer was attempted in a critically selected group of individuals in which the survival rate approaches seventy-five per cent (75%). The operable group represents only about ten (10) to fifteen per cent (15%) of all cases seen. This report is as yet incomplete and is not intended to be accepted as a general method of treatment of carcinoma of the cervix.

For the purpose of adequate study, we have statistics from Bonney in England who is the chief proponent of the surgical attack on carcinoma of the cervix. In five hundred surgical cases he has a five-year survival rate of forty per cent (40%), a mortality rate of about twelve per cent (12%), and an operability rate of sixty per cent (60%). Of these five hundred cases, three hundred were clinically free from metastatic nodes, and the survival rate in this group is fifty-two per cent (52%). Two hundred patients had metastases to the nodes and only twenty-two per cent (22%) of these survived five years. His operation is a radical procedure and includes removal of the iliac nodes.

On the use of radium in the irradiation treatment of carcinoma of the cervix, Waterman of Rhode Island, is an outstanding authority. In his method he uses a varying number of low — intensity radium needles inserted into the cervical lesion and parametria. In a comparative series according to stage of disease, he reports a five-year survival rate of forty-three per cent (43%) (3% better than Bonney's), a mortality rate of practically zero, and an operability rate of seventy-six per cent (76%) according to

Bonney's standards. In addition, in the group without clinical lymph node involvement, his five-year survival rate is eight per cent (8%) better than Bonney's. Those with lymph node involvement have a survival rate six per cent (6%) better than Bonney's. Comparison of Waterman's stage one cases, which represent almost a third of the total cases seen, with Meig's operated series which represent about one in ten of the total seen, we find Meig's survival rate only four per cent (4%) greater. Meig's ultimate mortality rate would, of course, equalize these figures to some extent.

The problem confronted particularly in cancer of the cervix is the possible involvement of pelvic tissues other than the cervical lesion. Since carcinoma in situ, in a young woman in whom it is deemed advisable to preserve the ovarian function, is one important indication for surgical removal of the cancer-bearing tissue, it is incumbent upon the surgeon and examining pathologist to review numerous microscopic areas of the removed tissues to establish that no malignant cells remain. Any other type of surgery fails unless it is very radical to include not only pan-hysterectomy but also lymphatics to the bifurcation of the iliacs and with this procedure a ten per cent to twenty-five per cent (10-25%) mortality. It is probable that one per cent (1%) or less of all patients with carcinoma of the cervix will be selectable for radical operation, primarily or for radio-resistant lesions.

Since it is almost impossible to state clinically that there is no extension of the lesion beyond the portio vaginalis, it becomes necessary to extend treatment to include not only the parametria but also the lymphatics and lymph nodes which may be involved and which can be adequately treated. The treatment is best conducted by a combination of x-ray and radium irradiation. Recent studies have established definitely that from thirty per cent (30%) to fifty per cent (50%) of patients with early cervical carcinoma, who were examined carefully by various surgeons

and considered operable, later disclosed metastatic lymph node involvement. In forty-three per cent (43%) of the more advanced cervical carcinoma cases studied, autopsy findings indicated lymph node extension beyond the true pelvis. It would seem mandatory, therefore, that both local and general forms of irradiation are the minimum requirements for treatment of early cervical carcinoma. No matter for how long a period of time or how much radium is used, none of its gamma irradiation will penetrate sufficiently far to sterilize the carcinoma-bearing area, either as a tandem or as a colpostat. The use of radium needless allows the distribution of emanation to be more uniform, and to reach more successfully the involved areas.

In no other treatment of cancer is the judicious application of radium and roentgen rays more convincing or effective than in treating carcinoma of the cervix. A brief survey of the dosage distribution is interesting. We can divide the pelvic into several regions and designate the following areas: Cervix proper, paracervical triangle, lateral pelvic wall, and bladder and rectum. By placing three radium capsules in the uterus and three in the vagina, each containing ten mgm. of radium and leave them in place for one hundred hours, we find our dosage to be 6000 mgm. hours. This is ordinarily considered maximum radium dosage in this particular arrangement and is not recommended for general use. However, even though the cervix proper receives approximately 13,000 gamma r., or thirteen erythema doses, the lateral pelvic wall receives only 1500 gamma r., or one and one-half ($1\frac{1}{2}$) erythema doses. To bring the dose to the lateral pelvic wall, where the metastatic nodes frequently lie, up to a sterilizing level, we must add from 2,000 r to 4,500 r or from four to nine erythema doses by x-ray or by some other means. This is most expeditiously attained by external irradiation. It might be added that the bladder can tolerate a tremendous amount of irradiation, the small bowel somewhat less, and the rectum least of all. Protection of these organs should be maintained at all times when possible without lessening the tumor dose. The maximum dose tolerated should be given rather than the minimum curative dose. Minor injuries such as proctitis, cystitis,

pyometria, and blistering of the skin are of no relative importance.

The advocates of external irradiation also make these claims:

1. Bleeding usually stops within ten days — the patient may develop a leucopenia but never an anemia from irradiation for carcinoma of the pelvis. Usually the red cell count improves.
2. Infection and slough decreases, and infection lowers the efficacy of any type of irradiation because infected tumor is more radio-resistant.
3. Bulky tumors regress, permitting easier and more localized subsequent application or radium.
4. Preliminary external irradiation lessens the likelihood to disseminate tumor cells by manipulation in subsequent radium application.
5. But most important of all: Sterilization of the lymphatics and the parametria can best be accomplished by this method.

Exceptions to treatment by external irradiation are:

1. Very early carcinoma—precancerous types and extremely small lesions.
2. Endocervical carcinoma found first at curettage.
3. Very obese, crippled, debilitated, or mentally infirm patients.

By this combined method, with practically no mortality and little morbidity, we find the five-year survival rates as follows:

Group I: 70% — 85% Group II: About 65%
Group III: About 40% Group IV: About 10%.

This is according to the Schmitz' classification which varies somewhat from the League of Nations classification particularly in the first three groups. Group I and II correspond to Stage I League of Nations. Group III to Stage II, and Group IV to Stages III and IV.

So in early carcinoma of the cervix, the approximate five-year survival rate to be expected from adequate combined x-ray and radium treatment is seventy per cent (70%) or more without mortality and including all cases, contrasted to the best there is to offer in surgical treatment, with a five-year survival of sixty per cent (60%) and better than ten per cent (10%) mortality. With radium treatment alone by means of tandems and

(Continued on Page 107)

Fractures of the Hip

James Wm. Martin, M.D.

When Shylock said, "If I can catch him once upon the hip, I will feed fat the ancient grudge I bear him," he did not literally mean he hoped he could break Antonio's hip; but he voiced the age-old experience that a hip injury is a grievous hurt.

Fractures of the hip have been chosen for presentation on this program in the hope that a general review of the problem will be of value. I use the word "problem" intentionally because fracture of the hip remains a problem in spite of notable recent advances in treatment. There are some inherent factors bearing upon the end—result which we cannot change, the advanced age of most of the patients, the frequently present systemic deterioration, the diminished reparative power of the osseous tissue involved, the heavy functional demand made upon the structure damaged. The head of the femur derives its blood supply from the nutrient artery extending upward from the metaphyseal region, from the superior and inferior capsular vessels and to a much less degree from a small vessel in the ligamentum teres which is often obliterated in the aged. Any fracture through the neck damages the circulation and jeopardizes the viability of the head.

The clinical diagnosis of fracture with separation is quite obvious because of the deformity, shortening and loss of function. But not all fractures of the hip present these findings. X-ray examination is imperative in all cases presenting pain after injury. Roentgenograms should be made in two planes, if the antero-posterior view leaves any doubt. Examination of Roentgenograms should be careful. If the hip is not broken, perhaps you have a central fracture of the acetabulum or fracture of the pubic or ischial ramus. Another point that may save later embarrassment is to suspect a secondary hip fracture in all fractures below the hip resulting from a fall from a considerable height. The more obvious fracture may be in the heel or about the knee; and the hip fracture may remain undiagnosed

for several weeks if a careful and complete examination is not made.

Roentgenological examination tells us more than the mere location of the fracture, that is, whether transcervical, intertrochanteric or pertrochanteric. Analysis of the plane of fracture tells us the mechanism of the injury, that is whether due to abduction or adduction; and indicates at least in part the requisite treatment. It also gives us a valuable aid in prognosis. The more horizontal the fracture plane is in a transcervical fracture the better the prognosis for union, because fewer vessels are severed and because there is less shearing strain on the fracture resulting from muscle retraction and the transmission of body weight.

We can accurately determine the plane of fracture by using the method of Pauwels or that of Linton. Pauwel measures the angle between the fracture plane and a horizontal line running through both anterior superior iliac spinous processes. Linton measures the angle between the fracture plane and a horizontal line extended medially from the long axis of the femoral shaft. The results of both methods are practically the same. Linton's method is easier because your film will always show the upper portion of the femoral shaft though it may not show both anterior spines of the pelvis.

A Type I, 35° angle or less, if impacted will unite without any treatment except restricted use.

A Type II, any angle between 35° and 75° will certainly not unite unless the shearing force is overcome by internal fixation. If operation is properly performed prognosis is very good.

It is in Type III, a 75° angle or greater, that the highest percentage of non-union occurs even with accurate internal fixation.

The shearing force is often greater than the restraining power of nail or pins.

In the treatment of fracture of the hip there is no longer any question as to the superiority

of osteosynthesis by means of internal metal fixation over previous methods. The Whitman method was a great advance and its originator deserves credit for the first real progress in this problem since the beginning of recorded medicine. But as experience was accumulated, it was found that even in the best clinics, non-union followed the Whitman method in 60% of cases fortunate enough to survive the long period of cast immobilization. The discomfort, the decubitus ulcers, the muscle atrophy, the joint stiffness particularly in the knee, and the damage to morale are other cogent reasons why a better method of treatment had to be found.

Many years before Smith-Peterson's epoch-making contribution, Murphy and others had used nails and screws unsuccessfully because technic and especially material were at fault. The principle was right. Smith-Peterson's technic of exact reduction under direct observation and efficient fixation by means of a stainless steel or vitallium three-flanged nail has overcome the earlier technical drawbacks, and tremendously improved the end-results.

Improvement in x-ray technic, and the perfection of technic for inserting the nail without opening the hip joint have extended the benefits of the procedure. In skilled hands, under most favorable conditions, the operation is a life-saving one. It is not, in my opinion, an easy operation. Perhaps most bad results are due to poor operations, and not to deficient blood supply to the femoral head. There has been too much blind nailing, blind in the sense that the operator is not certain where the nail is going. The operation is not an emergency one. Preliminary adhesive skin traction and rest for two or three days is good practice. This gives time for recovery from nervous shock, time for evaluation of cardiac and renal function, time for getting blood on hand for transfusion during operation, time for skin preparation.

For anaesthesia I prefer pentothal and nitrous oxide-oxygen.

The progressive steps in technic are pretty well standardized. After gentle reduction of the fracture by the Whitman-Leadbetter method, a guide wire is introduced through a quarter inch hole one inch below the base of the greater trochanter aiming at the center of the head. A wire introduced at an angle of

45° or 50° with the shaft while the limb is held in slight internal rotation will usually hit the right point. Two wires may be introduced at slightly different angles; and the one in correct position as revealed by x-ray is chosen. Fluoroscopy is not essential. Roentgenograms made in both antero-posterior and lateral planes are entirely satisfactory and easily obtained. Several methods for obtaining the lateral view are used. The best, in my opinion, is to flex the hip 90°, and make the exposure with the cassette in the tunnel under the hips just as when the antero-posterior view was made. If the hip is flexed carefully with a little traction on the thigh and the hip not externally rotated, the reduction of the fracture will not be lost.

The nail is then threaded on the wire and driven home to a point about $\frac{1}{4}$ inch distal to the articular surface of the head. Several schemes for determining the proper length of the nail are in use. In practice a nail 20% shorter than the distance it is to traverse as measured on the antero-posterior film will be correct. The head of the nail need not be sunk below the cortex but may protrude a little without harm.

There is some difference of opinion as to how soon the patient should be allowed out of bed. I wait one month. Muscle exercises, designed particularly to maintain tone and power of ilio-psoas and quadriceps, are begun the day following operation and are meticulously carried out several times daily. It is much easier to prevent muscle atrophy and joint stiffness than to correct these sequellae later. The criterion for weight bearing is x-ray evidence of bone union, which usually requires from 4 to 6 months. Walking is usually begun in a "walker" in preference to crutches. Complete union often requires twelve months.

So far we have been discussing transcervical fractures. The other varieties, intertrochanteric and per-trochanteric are of equal importance. They occur in a slightly older age group, are due usually to a more severe injury, and though they show little tendency to non-union they are more prone to malunion.

Closed methods of treatment may result in a high percentage of good results as far as union is concerned; but the long period of recumbency with all its discomforts make such treatment a most trying ordeal to the aged

feeble patient. Knee stiffness invariably persists. The incontrovertable advantages of hip nailing stimulated the development of techniques to extend these advantages to the lower fractures. The mechanical requirements are met by several devices which have been developed. Thornton added a plate to the Smith-Peterson nail, screwing it to the femoral shaft and bolting it to the head of the nail. McLaughlin strengthened the plate and improved the bolting arrangement. Neufeld modified Scuderi's V-shaped hip nail. Blount and Moore introduced blade-plates.

The technic of introduction of these various devices is essentially the same. Direction of nail or blade through neck is determined by a preliminary test guide wire, and the plate portion is securely fastened to femoral shaft with screws transfixing both cortices. Union occurs more quickly in these fractures than in transcervical fractures because the blood supply is abundant. X-ray evidence of union is of course the criterion which governs resumption of weight bearing.

A few remarks concerning non-union of fracture of the neck of the femur, are I think in order; for unfortunately non-union is the last word in too many cases.

The clinical diagnosis of non-union is quite evident, impairment of weight bearing, shortening, limp, weakness and pain in the hip and often in the knee. The x-ray is confirmatory. If it leaves any doubt "push-and-pull" pictures will settle the question. Treatment of non-union is determined chiefly by the viability of the head. If the head is still living, it is reasonable to attempt to secure union. Bone grafting with or without metal pinning, and the high osteotomies (McMurray, Dixon) are the operations to be considered.

The Brackett and Magnusson operations also should be mentioned, but experience has lessened their popularity. If they do result in union, a disabling traumatic arthritis too often supervenes.

If the head is dead, reconstruction operations (Whitman, Colonna, Albee) with or without insertion of a vitallium arthroplasty cup are suitable procedures. The Brittain pelvi-femoral arthrodesis also has given good results in this group.

In general bone grafting has a rather limited application. It is an extensive pro-

cedure, not well tolerated by aged feeble patients and it demands a long period of cast fixation. The osteotomies are relatively simple operations and give a high percentage of good results. The reconstruction and arthrodesing operations while not promising recovery of full function give quite satisfactory results considering the adverse conditions with which they deal. Freedom from pain even though motion is restricted is a most welcome gain.

In conclusion, let me say that American surgery has justifiable reason to be proud of the fact that the greatest advancement in the treatment of fracture of the hip has been due to the work of our own men.

CARCINOMA OF THE CERVIX

(Continued from Page 104)

colpostats the survival rates are approximately forty per cent (40%). Furthermore, recurrence in five years following surgery, according to Pack, is about forty per cent (40%) which offers no argument for those who claim viable cancer cells are found trapped in the fibrosis resulting from irradiation and which cells years later may receive sufficient nutrition to again become invasive.

The difficult problem is control of the spread to the obturator lymph nodes even after a sterilizing quantity of irradiation has been delivered. Recent work in an extraperitoneal approach to this region for removal of the nodes following adequate irradiation may add another means to remove this stubborn cancer-harboring area.

In summary, then, cancer of the cervix is a radiological problem, which in three-fourths of early lesions brings cure without mortality. Surgery should be limited to cancer in situ in young women, accompanied by careful microscopic sections, or to extremely radical procedures in radio-resistant lesions. Adequate external irradiation in conjunction with proper radium application provides the best method for producing sufficient ionization to sterilize the tumor-bearing area. The possibility of extension beyond the cervix is always present whether demonstrable clinically or not.

Toward Effective Cancer Control

Charles S. Cameron, M.D.

Medical and Scientific Director, American Cancer Society

Nowhere in the world do voluntary health agencies flourish in such abundance as they do in the United States. They are an expression of the charitableness of our people toward those less fortunate, and they are testimony to the democratic spirit of Americans in organizing and working cooperatively for the common good.

The American Cancer Society, a venerable member of the family of health agencies, should be thoroughly known to all doctors for its services are many. Through its national office in New York, its 61 chartered divisions and 2,613 county branches, it conducts a broad-based year-round effort to control cancer, one of the foremost medical problems confronting us.

The control of cancer eventually will come through an understanding of cancer's causes, means of prevention and effective treatment methods; this knowledge waits on research. The Society has recognized the importance of intensified investigative efforts in the field of growth and spends 25 per cent of its income in the support of such studies and in the training of young scientists to carry them forward. During the present year this support amounts to \$3,500,000. The total research expenditure for the past five years is \$13,153,560.

A substantial measure of control over cancer can be achieved today with the knowledge already at hand. The disparity between cancer's **curability** and the cures being achieved is striking. For example, cancer of the breast is curable in 80 per cent of patients who are treated when the disease is confined to the breast; yet the country-wide cure rate is less than 35 per cent. When cancer of the rectum is confined to the mucosa, cure rates of 70 per cent have been reported; yet the overall rate of cure is about 11 per cent. Similar differences hold for most forms of the disease. In order to achieve a larger measure of cures, the American Cancer Society engages in an intensive educational and publicity campaign,

based on knowledge of cancer's early signs and symptoms (the Danger Signals), and the value of periodic physical examinations.

April is the month when the American Cancer Society makes its annual appeal to the public for support of its programs. As more and more of our people live longer, the incidence of cancer increases. As the problem becomes more widespread, so must the effort to control the disease be intensified. The Society is dedicated to the principle that through education and research an effective measure of cancer control may be achieved at this time.

Improved services to patients with cancer are provided by support of cancer clinics, organized programs of cancer detection and information services; these efforts are augmented by a corps of volunteers who provide loan closets, transportation services, recreational activities and dressings.

Of immediate interest to doctors is the professional education program. During the past year, three monographs of a series dealing with cancer by anatomic site have been distributed to practicing physicians throughout the country. The series will be continued this year, with distribution at three-month intervals.

The professional journal **CANCER**, which first appeared in May, 1948, has been well received by clinicians and investigators interested in the problems of abnormal growth. A series of motion pictures for professional audiences, treating the problems of early diagnosis of cancer by anatomic site, has been outlined. Two of the films have been released, the first concerned with the general problem of the early diagnosis of cancer and the second concerned specifically with the early diagnosis of cancer of the breast. A third, covering cancer of the gastro-intestinal tract, is in preparation and will be released this year.

A new publication of the Society will ap-

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Cancer of the Breast

W. C. White, M.D., New York, N. Y.

Cancer of the breast starts as a local disease and that is our salvation. Moore¹ of Middlesex Hospital, London, advocated this strongly in 1874. This really gave us the start in our treatment of breast cancer. It was shown by Volkmann² that the cancer often involved the fascia of the P. Major so that simple mastectomy was not enough. Then the clinical observation that the cancer's first metastasis was to the adjacent axillary lymph nodes stimulated the more radical procedure which flowered, in this country, under Halsted and Willy Meyer.

Recently I attended a medical convention at which there were scientific exhibits for the education of those in attendance. One of the exhibits had photographs of cancer of the breast. What did I see?

1. Extensive orange peel skin with retraction of the nipple.
2. A large ulceration of the breast with an axilla swollen from metastatic glands.
3. Inflammatory carcinoma — all signs of cancer, advanced enough to be incurable.

Fortunately we seldom see this advanced cancer, thanks in part to the splendid propaganda of the American Cancer Society.

The cancer that we may help is the earlier one. It is true that retraction of the nipple, a palpable hard lump in the breast with a dimple in the skin almost always means cancer. But what I wish to emphasize is the increasing number of cases that we now see in which there is no retraction of the nipple, no dimpling of the skin, no palpable axillary nodes — just a small, painless, hard lump, freely movable under the skin. It feels just like a benign fibroadenoma. And both are opaque to transillumination.

I will refer to another type in which there is no tumor to be felt. That is the case in which there is a bloody discharge from the nipple. Written words come back to haunt a writer. This year I was quoted in an article to the effect that bleeding from a nipple was of no harmful significance. This was a quota-

tion from a statement in 1922³. I have long since withdrawn that statement. I now believe that it is often a sign of cancer, and one should not rest until he has eliminated that possibility. With transillumination, one may usually demonstrate the spot from which the bleeding arises, so that a proper skin incision with partial excision of the mass followed by pathological study will demonstrate if it is a bleeding papilloma of a large duct, or a carcinoma.

Another type is Paget's disease of the nipple; a minute ulceration of the nipple that does not clear up with palliative treatment and often is not associated with palpable tumor. This disease is malignant. In my belief it arises from the large ducts beneath the nipple and deserves radical surgery.

Of course we have benign conditions of the breast in which there is a single mass, firm, smooth, and freely movable. An aspiration will withdraw the straw-colored and brown fluid of a cyst. The mass will disappear. If there is any question in the mind of the surgeon, operate, excise, and make pathological sections.

If the tumor mass is solid, a well trained pathologist with experience in needle biopsy material could give an opinion on the tissue removed by needle puncture. Personally, I believe that excision of the mass followed by large tissue sections is preferable. With the majority of pathologists it is more satisfactory. One weakness of the needle biopsy is that a negative report does not exclude cancer. The needle may have hit the wrong spot.

It is our practice to remove all single masses in the breast, to make sure that we are not dealing with cancer. With diffuse lumpiness we are apt to believe that we are dealing with a diffuse cystic mastitis, and since the speaker has never been convinced that cystic mastitis is pre-cancerous, he has not urged surgery **UNLESS HE HAD ANY DOUBTS.**

I have not gone into the histological classifications because they are so variable and so

confusing. For our purpose we may just ask if the mass is malignant or benign.

When my first article on cancer of the breast appeared in the *Annals of Surgery* in 1922,³ I thought that I knew most of the answers. As time has gone on, and my experience with the disease has increased, I have become less certain as to my knowledge. However, I believe that we are making progress, and I shall attempt to say in this talk, in what way.

Before this audience, it may be presumptuous to speak in detail about how to do a radical mastectomy, but at least let me assure you that there is no present agreed method of doing a radical mastectomy. There is agreement that the breast, the pectoralis major and minor, and the axillary contents should be removed in a radical mastectomy, preferably in one mass. But there the agreement stops. There are three points of difference:

1. The amount of skin to be removed.
2. The necessity of skin graft.
3. The method of undercutting the skin in the peripheral dissection.

Halstad⁴ used a "wide" excision of skin and always left a raw area that was covered immediately with a skin graft. Handley⁵ did not believe that more than a 2½ inch radius of skin from the tumor was necessary, as the tumor, he believed, spread by permeation through the deep fascia. Because of this hypothesis, he believed that undercutting of the skin superficial to the deep fascia was sufficient. In fact, by this method he was able to bring the skin edges together without the need of skin graft.

In New York we have had several surgeons who believed that the spread of cancer of the breast was in the lymphatics just beneath the cutis of the breast so that it was necessary to cut so near to the cutis that no fat was left. They also always left a raw area with immediate skin graft. Haagensen,⁶ a strong advocate of the latter technic admits, however, that "the ultimate value of the method will, of course, depend on the demonstration of a decreased incidence of local recurrence."

At the present time the proponents of empirical assumption of the extreme undercutting with skin graft have yet to prove their contention, for a study of the following table will confirm my observation.

LOCAL RECURRENCE	5 YEAR RESULTS	
	LIMITED TO BREAST	
Roosevelt Hospital (7)	Plastic	10.8
Presbyterian Hospital, N. Y. C. (8)	Graft	9.7
The Henry Ford (9)	(Plastic	5.5
	(Graft	8.3

Oliver and Sugerbacker¹⁰ state "decreasing the incidence of skin recurrence would appear to be dependent among good surgeons, not on the commonly discussed variation in surgical technic but on the earlier diagnosis and surgical treatment and on the adherence to even narrower criteria of operability, than have been previously followed."

There is another factor in the local recurrence which is not related to the amount of skin removal, skin graft, or the method of undercutting. This factor is the transplantation of cancer cells about the raw wound during the course of the operation. Brandes and I¹¹ some years ago tried to find out the cause of an unfortunate mishap that I had. After doing a radical mastectomy on a woman with a small breast, I found that a skin graft would be necessary. So, without changing my gloves, I went down to the thigh and removed some skin with a dermatome. Three months later, she developed adenocarcinoma of the donor site.

This aroused suspicion that our gloves might be transplanting cells. So we washed our gloves frequently in sterile normal salt solution basins, had the fluid centrifuged, and demonstrated cancer cells in the centrifused specimen. This has also been demonstrated by Saphir¹² and others.

Before giving five year results I may digress, to point on the startling weakness of our present system of statistical reports. This was impressed on me when a certain group recently reported a local recurrence rate of six per cent only but their series included cases operated upon **within one year**. No wonder they were better than our results which included local recurrences, 11, 13, and 17 years after operation. They should have reported only on a minimum of five years, and I should have reported the condition at the end of five years and no later. This is an example of the fact that we are not using common denominators. Another questionable practice is the exclusion of cases from the mortality per cent who have allegedly died of other causes than cancer in the five year

period. It has made some reported results look too wonderful. This is such a serious disease that we should be careful not to be too wishful in our thinking.

It would be a wonderful and constructive act if the American Cancer Society would set up a committee to study and report on this subject so that all of us would eventually be talking the same language in our reports.

The results of operative surgery have been reported as follows:

FIVE YEAR FREEDOM FROM RECURRENCE

Lahey Clinic (13)	Local	75%
	Axillary	37%
Memorial Hospital (14)	Local	76.8%
	Axillary	41.8%
Roosevelt Hospital (7)	Local	61.2%
	Axillary	17%
Presbyterian Hospital (8)	Local	61.2%
	Axillary	21%
Mayo Clinic (15)	Local	75.8%
	Axillary	30.5%
Massachusetts Gen. (16)	Local	75%
	Ax. Metas.	33%

These reports must be considered as coming from competent clinics. A certain amount of variation in results may be expected in reports of hundreds as opposed to thousands of cases. But there is another factor that must be borne in mind, by the reader. That is the attitude of the clinic at the time of the report as to inoperability. What percentage of cases are refused operation because they are thought to be beyond relief. See how quickly it changes the results in the group "cancer with axillary metastases." So please do not lean too heavily on statistics. Consider each case individually.

So far, the only cures that we have been able to obtain have been by surgery. There are certain cases that surgery has not been able to cure; so it would be well to cite the clinical types of carcinoma that are not curable by surgery, i.e., inoperable. They are:

1. When supraclavicular nodes are involved.
2. When distant metastases are present.
3. When there is edema of the arm.
4. When extensive orange peel of the skin over the breast is present.
5. When satellite nodules are present in the skin of the breast.
6. When carcinoma of the inflammatory type is present.

It is open to question

1. If massive axillary nodes are present and proven by biopsy to be metastatic,
2. If cancer is present during lactation,
3. If the patient is pregnant,
4. If the tumor is fixed to the chest wall,
5. If there is extensive ulceration of the skin.

Smith,¹⁷ in a study of thirteen cases of pregnancy with untreated tumor, found that the patient has a better prognosis if the pregnancy is not interrupted. It is also of distinct advantage to the patient to treat these tumors and ignore the pregnancy.

In some of the borderline cases I believe in surgery, if there is only a very small chance for, otherwise, honestly, what have we to offer — only palliation. I have been agreeably surprised to have succeeded now and then in obtaining a five year freedom from such a type.

Surgery has the chief responsibility in the treatment of this disease, but even the most enthusiastic surgeon admits that he has twenty-five per cent failure in five-year freedom in his most favorable group: localized cancer without pathological evidence of spread to the axillary nodes; 60 to 80% failure in cases with axillary metastases.

It soon became obvious to the physician that surgery gave a poor outlook in many cases, so that search was made for other forms of therapy. High voltage Roentgen therapy came into practice first in the massive dosage, then in the divided dosage as advocated by Contard. Even today we hear of the need for and the use of million-volt machines, evidence of dissatisfaction with the present prevailing technic.

Our experience with Roentgen therapy has been confined to the 200,000 volt machine and the use of divided dosage given daily over a long period through many ports. In a study of two series of cases at the Roosevelt Hospital, each followed for five years, in the cases treated with Roentgen therapy. Marshall¹³ and some others think that their results are a little better, but in general, the results are in accord with our findings. As a result we are less inclined to use Roentgen Ray except as a palliative in some local superficial recurrences. We have abandoned completely pre-operative Roentgen therapy.

The sensitivity of breast cancer to X-ray is variable, and in my opinion, not to be judged

by the microscopic section. I will say that at times I have seen a few cases of recurrence that have had remarkable relief for one to two years. So that I may say that in a few cases, life has been prolonged by X-ray therapy.

In our present technic, we irradiate the operative area, including the axilla and the supraclavicular space. In a series of 119 cases in which the site of first recurrence was noted, almost 60% were outside of this field of X-ray therapy. To X-ray the whole body is scarcely feasible and fraught with other dangers.

In recent years there has been renewed interest in the hormones as carcinogenic agents. Before the turn of the century, Beatson and others practiced bilateral oophorectomy as a method of controlling cancer of the breast. His high operative mortality made him abandon an operation that, for the moment, was empirical.

I have a feeling that the recent interest in hormonal therapy for breast cancer received a tremendous stimulus from the work of Huggins and others in cancer of the prostate.

In addition to radical mastectomy, we have these additional main lines of attack: X-ray sterilization, surgical sterilization, or hormonal medication. Perhaps a combination of one or the other of the first two with the third.

Roentgen therapy to the ovaries is an old friend. Dresser introduced it years ago. For a time it seemed to be a definite step in advance. At times it seems to have been an aid in metastases to the spine and pelvis, but there the direct X-ray treatment to the bones was going on at that same time so that it was difficult to evaluate its role compared to the loss of estrogenic function.

J. S. Horseley¹⁸ and later his son, Guy,¹⁸ have published reports which indicate the favorable influence that bilateral oophorectomy has on the results of radical mastectomy for cancer. This is an interesting revival of the Beatson operation. The results so far published have been too few and of too short a duration to be of much value. Adair has reported that in 34 cases of surgical castration there was no improvement as compared to X-ray sterilization. I doubt if the operation will become popular.

The medical profession has become much

interested in the use of male hormone in the treatment of cancer of the breast. A. Prudente²⁰ of San Paulo, Brazil, states that "the relationship between hormonal mastopathia and mammary cancer, the influence of estrogens in the occurrence of this tumor, and the biological antagonism between androgenic and estrogenic hormones justify the uses of testosterone propionate in the prophylaxis of mammary cancer after operation." He has used testosterone as an addition to operation and feels that his results so far are "about 100 per cent better than those after operation alone" but he wisely comments that this figure is not absolute, since the number of observed cases is limited and other factors may have interfered. I might also comment that he reports practically no five year results.

Frank E. Adair²¹ has reviewed the literature and reported his experience and that of his associates on the breast service at the Memorial Hospital in New York City. He reports on a group of 450 patients who had been treated with testosterone propionate by intra muscular injection, pellet implantation, or methyl testosterone by mouth. He reports "two cases of bone metastases in which what may be considered successful palliation has been obtained for over two year." He observes "that it is common, in cases of metastasis to bone, to obtain under androgen therapy relief of pain, removable of disability, increased appetite, gain in weight, ability to sleep without narcotics, delay in the normal growth processes of metastatic cancer, and a feeling of well being."

The various clinics report various doses. There is still uncertainty about the proper dose. Testosterone propionate has been tried in doses of 50 to 100 mgm. three times a week up to 2000 mgm. per week. The tendency lately has been to give up the massive large doses which, incidentally, are very expensive. The pellets of crystalline testosterone are usually of 75 mgm. Two to four may be used in the post-operative wound.

If the dose is effective, the patient has definite voice change, hirsutism, diminution or cessation of menstruation and perhaps increased libido.

I think it is correct to state that the results have been less striking in the soft tissue tumor, although occasionally as in one of my

patients who had recurrence in the pleural cavity with effusion, six years after operation, with demonstrated cancer cells in the effusion, we have had three year freedom on 200 mgm. per week. However, it is not clear cut, as the patient had X-ray sterilization of the ovaries, and X-ray treatment to the chest at the time of the recurrence.

It is also fair to state that all reporters have had failures of relief in both soft tumors and in bone cases.

Our present attitude is that this investigation should be continued with vigor and enthusiasm. It holds promise of palliation in many cases.

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DOCTORS

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CARE OF HAND INJURIES

(Continued from Page 115)

joint); as transversely introduced fixation pins passing through adjacent bones to secure the fragments of metacarpal fractures; as penetrating fixation for fragments of carpal fractures.

Wiring or plating of fractures of the bones of the hand is generally unsatisfactory.

During the early period of immobilization, elevation of the hand is desirable. Immobilization of the injury should be consistent and continuous until healing and firm union have been established.

Healing of ligamentous injuries accompanying dislocations requires two week of immobilization following reduction.

Healing of fractures of the long bones requires immobilization for three to five weeks.

Healing of carpal bone fractures requires twelve to fourteen weeks' immobilization. Fractures of the navicular may require four months to unite. If immobilized consistently for this length of time, most of these fractures will not require surgical intervention.

4. Restoration of function.

During the healing process, all joints not necessarily immobilized should be freely moved to activate their controlling muscles and their use by the patient encouraged.

Following establishment of healing or firm union, restoration of function is secured by directed active motion, particularly through the means of exercise and occupational therapy.

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The Care of Hand Injuries*

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V

Fractures and Dislocations

I Protection of the Hand (Abstract of Article I)

The first-aid care of wounds of the hand is directed fundamentally at protection. It should provide protection from infection, from added injury, and from future disability and deformity. The best first-aid management consists in the application of a sterile protective dressing, a firm compression bandage and immobilization by splinting in the position of function.‡ No attempt should be made to examine, cleanse or treat the wound until operating room facilities are available.

II Requirements of Early Definitive Treatment (Abstract of Article II)

Early definitive care requires thorough evaluation of the injury with respect to its cause, time of occurrence, status as regards infection, nature of first-aid treatment and appraisal of structural damage. For undertaking definitive treatment, the conditions required are a well-equipped operating room, good lighting, adequate instruments, sufficient assistance, complete anesthesia and a bloodless field. Treatment itself consists of aseptic cleansing of the wound, removal of devitalized tissue and foreign material (exercising strict conservation of all viable tissue), complete hemostasis, the repair of injured structures, protecting nerves, bones and tendons and providing maximum skin coverage and the application of firm protective dressing to maintain the optimum position. After-treatment consists of protection, rest and elevation during healing, and early restoration of function by directed active motion.

III Surface Injuries (Previously circulated)

IV Lacerated Wounds (Previously circulated)

‡ Position of function or position of grasp: wrist hyperextended in cock-up position, fingers in mid-flexion and separated, thumb abducted, slightly forward from hand and slightly flexed.

V Fractures and Dislocations

The purposes of treatment of closed fractures and dislocations of the bones of the hand are:

1. Protection of the injured bony structures from further displacement and avoidance of added damage to soft parts.
2. Restoration of normal relations of the bony structures.
3. Maintenance of the corrected relation of the bones to permit healing, at the same time avoiding stiffening in position of nonfunction.
4. Restoration of function.

These objectives are sought in the various stages of treatment.

1. First-aid treatment

- A. Avoid manipulation or attempts at reduction until skilled attention is available and accurate diagnosis has been made.
- B. Prompt protection of the hand by complete immobilization in the position of function pending definitive treatment.

2. Definitive treatment.

When proper skill and facilities are available, this consists of:

A. Diagnosis by means of

- 1- Inspection to determine swelling, ecchymosis, deformity, loss of function.
- 2- Palpation, gently employed, to discover bony irregularity, point of maximum tenderness, referred pain. This sign is of importance in discovering fractures of the long bones, particularly where deformity may not exist or is concealed by swelling. Gentle pressure in the

* Note: This is the fifth of a series of articles on "The Care of Hand Injuries." This material is prepared by the American Society for Surgery of the Hand and is distributed by the Committee on Trauma, American College of Surgeons, through its Regional Committees.

line of axis of the long bone will result in pain at the fracture site.

- 3- X-ray examination. Obligatory where fracture or dislocation is suspected. Injuries in the region of the carpus require not only antero-posterior and lateral views but two or more oblique views in addition. Fractures of the carpal bones frequently fail to show in antero-posterior and lateral views.

B. Reduction. Restoration of normal position of bony structures should be secured at the earliest possible time by:

- 1- Manipulation.

Whether reducing a fracture or a dislocation, full relaxation, preferably under general anesthesia, is desirable. Manual traction, pressure and moulding should be gentle and deliberate to avoid further soft-part injury.

When attempts at reduction by manipulation are not promptly successful under these conditions, they should be abandoned in favor of open (operative) replacement. Dislocation at the metacarpophalangeal joint of the thumb will almost invariably require open reduction.

- 2- Skeletal control.

To maintain reduction, particularly of oblique or comminuted fractures of phalanges or metacarpals or fractures into joints, control by skeletal fixation may be required. This may be applied by means of a length of thin Kirschner wire inserted transversely through the distal end of the fractured bone or through the terminal phalanx of the finger. The hand and injured finger or fingers should be supported in the position of function on a palmer moulded curved form or ball splint. This alone will ordinarily suffice to maintain proper position after reduction by manipulation. When control by skeletal fixation is required for maintenance of reduction, the transfixing wire may be connected to this splint on its palmar aspect or to a

projecting frame, at or above wrist level, by elastic bands. Fixation or traction by means of a hole in the finger nail, or by adhesive applied to the finger, or by woven constricting device is not satisfactory. Continued straight traction on the fingers in the extended position is to be avoided.

- 3- Open reduction.

When manipulation fails to produce satisfactory reduction, open operative reduction is to be employed. This requires careful preliminary skin preparation and should be carried out under optimum operating conditions as described in II (Requirements of Early Definitive Treatment).

3. Maintenance of reduction.

Immobilization of bony injury following reduction should:

- (a) Be secured with firm, even pressure bandaging, permitting no motion at site of injury.
- (b) Be nonconstricting, not interfering with circulation.
- (c) Be comfortable, causing no excess pressure.
- (d) Preserve, as far as possible, the position of function, taking into account the normal concavities of the palmar surface of the skeletal structure (arches of the hand) and flexor surface curves of the phalanges. (Wrist in 30° dorsiflexion, metacarpophalangeal and distal interphalangeal joints in 45° flexion and middle interphalangeal joint in 90° flexion.) Flat splinting is to be condemned.
- (e) Leave free to move all joints whose motion will not jeopardize position and healing. During immobilization, active motion of all points not necessarily confined is to be encouraged.

Immobilization may be accomplished by:

- (1) Splinting or plaster casting, applied as described in 2 B Reduction.
- (2) Internal fixation. Kirschner wires may be employed, following either open or closed reduction, as axial intramedullary splints for individual long bones (not to protrude into a

(Continued on Page 113)

CUFF NOTES

Edited by

D. H. Manning, M.D., Sioux Falls, S. D.

Begining — Thirteen Points Necessary in Records for Court Cases.

1. Dates accurately entered. Every date of visit, or telephone call, or conference.
 2. The source from which the patient comes.
 3. The How, When, and Where of each accident is explained completely.
 4. Hospitalization data are obtained and entered in the history. Specifically including (a) name of the hospital (b) hour and date of admission (c) whether sutures were inserted and how many (d) whether the patient was conscious, semi conscious, unconscious, drunk or sober, walking or not when admitted.
 5. The patients own words are used in writing the history and complaints.
 6. In all cases (no matter where the lesion) five basic points are recorded among the findings. These are height, weight, blood pressure, pulse, signs and places of scars, size of scars preferably in inches.
 7. See that findings of the physician are carefully separated from other sources.
 8. Any items not in the doctors own handwriting are initialled by him.
- Next five points will be published next issue.

Medical Legal Implications and Status of Fluoroscopy.

It is pretty well established that the degree of knowledge and skill which practitioners of medicine are required to possess and apply is that degree of knowledge and skill ordinarily possessed and applied by members of their profession in the same line of practice in the same or similar locations and at the same time.

While it should be indelibly impressed upon us that, knowledge and skill may vary some-

what in different localities, the amount of radiation which may be properly and safely applied does not vary with the locality. In other words, the radiation which may be applied to the human body, particularly in and during a diagnostic procedure, is so near a fixed and measurable amount, that the physician using and applying the same should be cognizant of the proper dosage and not exceed it whether he is practicing in Pumpkin Center, Fedora, Yankton, Sioux Falls, Chicago or New York. I. S. Trostler, Chicago, "Radiology" Feb. 1950.

Medical Management in Pediatric Surgery

As important as the good surgical technique is to the successful outcome in pediatric surgery, failure to give keen attention to medical factors offers a serious threat to good results.

These factors are:

1. Hydration, consisting of administering parenteral fluids if the oral route is not available with particular reference to the selection of the correct fluid, route, rate, and technique.
2. Restoration and maintenance of caloric, nitrogen and acid base balance.
3. Measures to conserve body heat.
4. Relief of apprehension, pain and prevention of psychic trauma.
5. The restoration of a normal blood picture.
6. Measures to control and prevent infection.
7. Symptomatic and supportive therapy, oxygen, etc.
8. Consideration of the factors of growth and development in the selection of the time for elective surgery.

EDITORIAL PAGE

"POLITICS AND MEDICINE DON'T MIX!"

Statements like this frequently are employed by many doctors to justify their failure to register, failure to vote and failure to take part in the political decisions of the local community, the State and the Nation.

Added to this viewpoint is the indisputable and somewhat extenuating fact that the best doctors are extremely busy people, engaged in the night-and-day task of preserving health and saving life.

Nevertheless, this year of decision, 1950, presents American doctors with an undeniable paradox: doctors either must enter the political arena or see politics enter medicine.

For this is not just another election year. It is a year in which medicine itself will be one of the big clap pigeons on the political shooting ranges. The question of Compulsory versus Voluntary Health Insurance — embodying the future not only of the medical profession but of all the American people — will be one of the principal issues in the 1950 Congressional elections.

It is imperative, therefore, that every doctor exercise his franchise this year — his right as an **individual citizen** to register, to vote, and to help influence the political direction of his Nation.

Failure to do so, this year, may mean the ultimate termination of his traditional medical franchise — the right to practice medicine according to ethical professional and scientific standards — not political standards.

THE RESOLUTION

For three days in March, a representative of the National Education Campaign of the American Medical Association visited South Dakota to step up the campaign of securing resolutions from various groups against socialized medicine.

Some of us who may be inclined to feel that resolutions are a mild form of attack on the

social-planners should have had the opportunity to talk with the Campaign representative. The integrated plan of attack using the grass roots statements of hundreds of individual clubs and organizations to show the nation the true feelings of the people will go far toward defeating the socialistic plans that tend to make government over the people rather than government by the people.

The Journal urges all medical groups and their auxiliaries to take immediate steps to implement the campaign by participating in arranging such resolutions in local clubs to which they may belong.

CONGRESSIONAL CANDIDATES COMMENT

As is customary, during an election year, the South Dakota State Medical Association through its Journal, makes available to its members statements of the various candidates for congressional office on their positions on socialization of medicine.

In a prepared statement, Senator Chan Gurney, running for re-election states:

I am vigorously, unreservedly, and unalterably opposed to socialized medicine in any form.

If there is any field of endeavor from which the federal government should remain completely divorced it is the field of medical care.

The intrusion of the heavy, bungling hand of government in the relationship between an American citizen and his medical advisor would not only be injurious to national health and "bureaucratize" our doctors, but the financial burden it would impose on the taxpayers would ultimately prove unendurable.

I will continue to oppose socialized medicine — no matter in what artful disguise it may come before the United States Senate.

In a letter to the Executive Secretary, Joe Bottum, Jr., running for Congressman from the 2nd district said: "If I am elected to the office of Representatives from this district

I would oppose socialized medicine in any form."

Also in letter to Executive Secretary, Mr. E. Y. Berry, candidate for Congress from the 2nd district stated: "You may quote me that I am unalterably opposed to socialized medicine."

Harold Lovre, candidate for Congress from the 1st district said: "I shall always oppose the government in medicine, because it is economically unsound and imposes limitations upon freedom of the people. In addition to providing inferior medical care."

Doctor J. H. Tschetter was asked for a statement on his position, but made no comment for publication.

Sam H. Bober, democratic candidate; "We do not favor socialized medicine."

Merton B. Tice, democratic candidate; "I am opposed to socialized medicine. Just as a lawyer, I would be opposed to socialized law."

Frances Case, republican candidate for U. S. Senator in a letter stated:

I am not in favor of socialized medicine as that term is commonly understood.

We live in a world which has created new threats to public health. People cannot individually determine the effects of radiation on human tissues. Victims cannot individually find the answers to cancer, heart disease, polio and tuberculosis.

Nor can communities that are drained of normal revenues either by distant corporations or a tax-greedy government always provide the hospital facilities consistent with the needs of the community or the self-interest of government.

So, I do support various research and clinical programs in the field of preventive medicine.

And I do support the federal aid program for hospital construction.

But I do not favor and will continue to oppose efforts to institute a medical program which destroys individual choice and puts medical services on a time-clock basis.

GULLIBLE'S TRAVELS

On very short notice **Dean Slaughter** and I drove to Pierre March 2 to consult with the Governor on the appointment of some medically trained persons to attend a training session on medical defense against atomic attack. After a discussion, it was decided that the State Department of Health and the Medical School should be represented as the agencies best able to spread the information to the profession so **Drs. Slaughter** and **Van Heuvelen** were appointed by **Governor Mickelson**.

Late that afternoon Dr. Slaughter and I drove to Huron where we stopped over at the Marvin Hughitt and spent some time discussing Association matters with Association President, **Dr. William Saxton**. Drove home the next day to spend a few hours in the office.

Saturday morning, the 4th, I discussed by phone the Hayti DP doctor problem with **Casper Nohner**, Hayti newspaper editor. Later in the day I drove to Hayti and discussed at length the stand of the Association on DP doctors. It is to be hoped that some of the information given **Mr. Nohner** will temper some of the misinformation that he had already published.

On Tuesday I was supposed to speak to the Aberdeen District Society on Coops but the big blizzard cancelled that meeting. Same thing happened to a nurse survey meeting scheduled for Huron that Saturday.

Monday, March 13, I spoke on the trend toward socialism at a meeting of the Sioux Falls Rotary Club. The talk was arranged by **Dr. Breit** but the introduction to the club was made by **Mr. Halliday** who was program chairman for the month.

On Wednesday I drove to Mitchell where **Dr. B. R. Skogmo** introduced me to the Kiwanis Club where I spoke on the status of health legislation in Washington.

Drove directly from Mitchell to Rapid City where I ran into **Dr. A. A. Lampert** and his wife and ate a snack with them at one of the restaurants. The next morning I arranged to record six five-minute health talks by Doctors **Skinner, Kobza, Hare, Dawley, Berkman,** and **Geib** all of Rapid City.

That afternoon we made the six recordings with the splendid cooperation of newscaster **Abner George** of KOTA.

After dinner at the Alex Johnson with Dr. **Lyle Hare** and his family I spoke briefly to a gathering of Rapid City doctors and pharmacists. A good representation of the city's doctors were there.

On both Thursday and Friday I had the pleasure of sitting in on some informal public health discussions at the Pennington County Health Unit with **Dr. Skinner**; **Dr. Van Heuvelen**, of Pierre; **Dr. Blankenship** of USPHS, Kansas City; and representatives of interested groups in Rapid City.

Friday morning **Dr. Skinner** and I returned to KOTA to re-record his talk due to the original having the accompaniment of a bass fiddle which was zooming in the next studio.

Met then with **Rev. A. A. Schade** of Huron and later in the day proceeded to Sturgis to discuss hospital plans with members of their planning board. Returned to Rapid City in a semi-blizzard. In Huron, it would have been a blizzard, but those atmospheric phenomina do not exist in the Black Hills.

Sunday night, March 19, I called the Carpenter Hotel to locate the representative of the American Medical Association's National Education Campaign who was to tour the Eastern half of the State with me to start the resolution program going. **Mr. W. F. Mitchell** was the man who came and we laid our plans to meet the heads of various leading state organizations.

On Monday morning at eight A. M. we drove to Vermillion and arranged to have **Mr. Montgomery** of the S. D. Chamber of Commerce Executives make a mailing to the various units.

We then returned to Sioux Falls where at 2:00 P. M. we made the same approach to **Mr. Earl James**, State Adjutant of the VFW and arranged for a mailing to all of the posts in the State.

After leaving the VFW office we learned that **Mr. Walter "Speedy" Travis**, State Adjutant of the American Legion was in Sioux Falls so we contacted him at the Cataract Hotel and made tentative mailing arrangements to the many Legion Posts. At the same time we discussed the matter with Commander **Christofferson** and Assistant Adjutant **Murphy**.

At 5:15 we met with **Miss Irene Sabers** of the Business and Professional Women's Clubs

and arranged for a similar mailing in their group of clubs. Directly after this meeting which was in our Association office, we ate dinner and headed for Canton where we met with **Mrs. Theola O'Bannion**, State Secretary of the Auxiliary to the VFW and conducted the same business.

At eight o'clock I spoke to the Canton Unit of the Lincoln County Farm Bureau on the insurance plan endorsed by State Medical Association and received excellent cooperation.

Tuesday morning I spent some time at the office and then drove with **Mr. Mitchell** to Aberdeen where we met with **Mrs. J. N. Melin** representing the Federation of Women's Clubs. Then we started to locate **Mrs. Amy Andersen** of the Auxiliary to the American Legion but were unsuccessful.

At dinner we spent the early part of the evening with the Aberdeen District Medical Society. **Dr. John Rodine** presided at the meeting and introduced both Mitchell and myself to say a few words. **Dr. C. B. McVay** of Yankton was the scientific speaker for the evening.

After the meeting we drove to Pierre to be on the grounds to talk to **Karl Goldsmith**, who in addition to all his other activities, is secretary of the State Bar Association. We met with Karl at 11:00 A. M. but before we saw him we visited briefly with **Denny Cosgrove**, the new Republican State Chairman; **Dr. Van Heuvelen** of the State Department of Health; **Larry Mayes**, Chairman of the First Voters Committee; and **Mr. Wilder**, head of the State Division of Taxation.

From Pierre we drove to Mitchell where we met with **Mrs. Sharnweber** of the D. A. R. and visited the managers of two of the hotels to make some arrangements for the Annual Meeting.

An hour later we were in Huron laying plans to get resolutions from the Farm Bureau Federation. **Mr. Kenneth Johnson**, Executive-Secretary, gave us the usual fine cooperation that we have learned to expect from the Bureau. From Johnson's office we stopped at the Huron Clinic to introduce **Mr. Mitchell** to **Dr. W. H. Saxton**, president of the State Medical Association. Put "Mitch" on the plane at the Huron airport and then lit out for Sioux Falls and a good night's sleep.

OUR ANNUAL MEETING BANQUET SPEAKER

Elsewhere in this issue is a picture and story on our Annual Meeting banquet speaker, Mr. Edward O'Connor of the Insurance Economics Society of America. Mr. O'Connor has a brilliant reputation as a speaker and as an outspoken opponent of socialization.

For the past year and a half the Society he represents has been one of the strongest allies that the medical profession has had. The Journal editors hope to see the largest crowd in recent years attending the banquet to hear Mr. O'Connor speak.

ARE DOCTORS CITIZENS?

There has been plenty of evidence in recent years to suggest that some people in this country are not altogether certain of the answer to the question: are doctors citizens?

The astonishing demand from several political sources, that payment for doctors' services be made by Government paymasters, is compelling indication that some people think the doctor is different from other citizens, with a different sort of civic obligation and a different sort of individual rights.

No other professional man in America — no businessman, no butcher, no plumber, no baker, no clergyman, no grocer, so far as we know — has to date been nominated to share with the doctor the dubious distinction of having his income paid by Government and his product or service made "free" to all comers. It is conceivable such suggestions may come later. Certainly in the logic of socialism, a case could be argued for making the work of all these essential people a function of Government.

Perhaps some day such a case will be urged. We have an idea that when it is, it will split wide open on the plumber. There is a hard core of common sense in the American people and a blunt insistence on the individual freedom of every man.

There are a good many things American citizens won't stand still for — and don't expect other citizens to stand still for either. Which brings us back to the question, "Are doctors citizens?"

We'll know more about the answer after next November. The coming Congressional elections will give the whole country a good yardstick with which to measure the citizenship of the medical profession.

Is it a citizenship that influences Government, a citizenship that is informed about candidates, a citizenship that means registration, voting, working for the candidate chosen?

Or is it negative and passive when faced with the vital issues of an urgent time? Is it too busy to be concerned with the public business of democratic Government?

The answer is up to every doctor. And the testing time will be the coming elections — the primaries as well as the final races in November.

This is the time for doctors to demonstrate in action what their citizenship means in America. Conceivably, it may be the last time.

SPEAK NOW . . .

Or else hereafter, forever, hold your peace.

In every human undertaking, there comes a time for action, a time for decision. You can describe it in the language of the marriage service, or — if you prefer — of the poker table, "Put up or shut up."

No matter how you phrase it, the alternative of such a time cannot be denied.

This year is a time of decision that requires positive action on the part of the medical profession. If this action is not forthcoming, doctors cannot reasonably complain of the consequences.

This is a year in which the American people elect Senators and Congressmen to represent them in Washington. Under our system of Government, it's up to every citizen to work for the success of candidates in whose views he believes. Only through **active** effort can we have **good** Government.

This responsibility is now squarely before all doctors. If they are to be well represented they must work, and they must start now. Doctors, their families, their friends, all they can influence must be registered. On election day — in primary balloting and in November — it's up to the doctors to help turn out the vote — the vote for their candidates.

There is only one way to preserve American freedom — medical freedom — under our democratic process. That way is the voting way . . . the electioneering way. It's the best way ever devised, but it poses responsibilities.

They are responsibilities no doctor can afford to sidestep. They are responsibilities that need meeting . . . now . . . today.

DOCTORS

Because of Mitchell Fire

Annual Convention

to be held

at

Huron

at

Marvin Hughitt
Hotel

This is

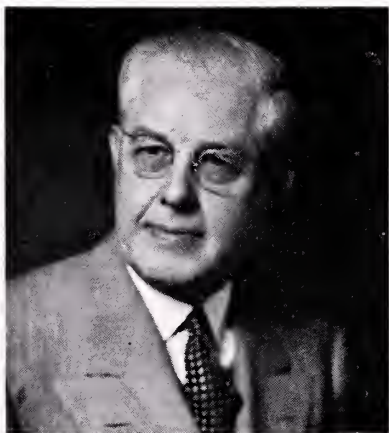


APRIL
1950
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YOUR MEDICAL ASSOCIATION

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

Guest Speakers To Be Heard At Annual Meeting, May 21-23

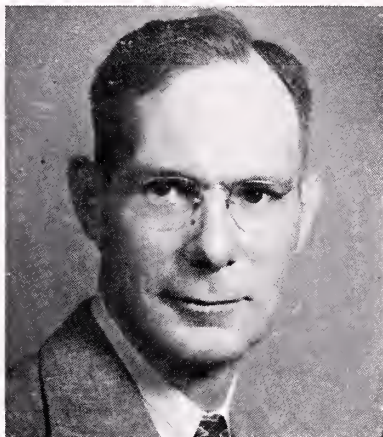


DR. JAMES SARGENT TO PRESENT UROLOGICAL SUBJECT

Dr. James C. Sargent, Professor of Urology at Marquette University, will present a paper on "Bladder Tumors" during the Monday sessions of the Annual Meeting. Dr. Sargent is widely known for his work in Urology and also for his activities in the field of Medical Economics. He is a member of the American Board of Urology and is chairman of the American Medical Associations' Council on National Emergency Medical Service.

Dr. Sargent will also ap-

pear on the program with a medical economic subject titled, "What of Tomorrow."



P. J. LEINFELDER, M.D. SCHEDULED FOR EENT AND GENERAL SESSIONS

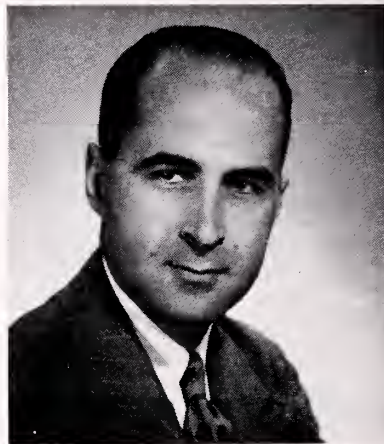
P. J. Leinfelder, M.D., professor of Ophthalmology at the University of Iowa Medical School will be heard on both the sessions of the Annual Meeting and the EENT Meetings.

Dr. Leinfelder will speak on "The Diagnostic Significance of Some Ocular Complaints," at the general sessions.

His topic for the Monday,

May 22 morning session had not been selected at press time.

Dr. Leinfelder received both his B.A. and M.D. degrees at Wisconsin and became associated with the University of Iowa in 1930. He became Professor of Ophthalmology in 1946. His special interests are in research on Neuro-ophthalmology and Cellular Physiology.



COLORADO U. OB HEAD ON ANNUAL MEETING

Dr. E. Stewart Taylor, professor of Obstetrics and Gynecology at the University of Colorado Medical School will present two papers in his specialty at the Annual Meeting in Huron.

His first paper will be "Hypertensive States Associated with Pregnancy"; his

second, "Hormones in Obstetrical and Gynecological Practice.

Dr. Taylor, originally from South Dakota was graduated at the University of Iowa and received specialty training at Long Island College. He served with an Evacuation Hospital in Europe during World War II and became professor of Ob & Gyn at Colorado in 1946.

He is a diplomate of the American Board of Ob & Gyn and a fellow in the American College of Surgeons.



ARMY RESEARCH HEAD TO SPEAK ON ANTIBIOTICS

Major Edwin Pulaski M.D., head of the Army Surgical Research Unit, Brooke General Hospital will speak on "Recent Advances in Antibiotic Therapy" at the Association's Annual Meeting.

Dr. Pulaski is a native of Pennsylvania and a graduate of the Medical School of that states' University. He is a diplomate of the American Board of Surgery. A Fellow in the American College of Surgeons, and a member of the Halstead Club. He is a

Professor of Surgery at Baylor and a lecturer in the University of Texas Medical Branch.

He is author and co-author of a number of medical articles dealing with traumatic wounds and with research in and use of Antibiotics.



FORMER SOUTH DAKOTA MAN ON ANNUAL PROGRAM

Earl C. Elkins, M.D., Section on Physical Medicine at Mayo clinic and former Spearfish resident will present a paper on "The Treatment of Polio" at the Annual Meeting.

Dr. Elkins has an A.B. from University College, Storm Lake, Iowa; M.D. from George Washington University; and interned at Emergency Hospital in Washington, D. C.

He has been a consultant on the staff of Mayo Clinic since 1939 and was President of the American Society of Physical Medicine in 1946. He was named President of the American Congress of Physical Medicine for the year 1949-50 and is a member

of the Board of Physical Medicine and Rehabilitation.

Dr. Elkins appearance on the Annual Meeting program is sponsored by the National Foundation for Infantile Paralysis.



INSURANCE ECONOMICS DIRECTOR IS ANNUAL BANQUET SPEAKER

Edward H. O'Connor, Chicago, Managing Director of the Insurance Economics Society of America, will be the banquet speaker at the Annual Meeting in Huron, Monday evening May 22. The banquet is scheduled for the Marvin Hughitt dining room.

Mr. O'Connor is widely known as one of the nation's outstanding speakers and is an outspoken opponent of the forces attempting to socialize the countrys' economy. In 1949 he received the award of "Man of the Year" in the disability insurance business, the award reading, "No man in our business has so aroused the people to militant action and purposeful thinking. He has convinced all who have heard him that socialism can-

not duplicate or replace Americanism."

Mr. O'Connor is undoubtedly one of the best qualified laymen in the nation to speak out against socialization in the medical field.

He assumed his present position in 1942 after establishing an outstanding career in insurance sales. His topic for the banquet address will be "The Farewell State."

SIoux VALLEY OFFICERS ELECTED

January 1950, officers were elected at the annual meeting of the Sioux Valley Medical Association. **Walter Benthack, M.D.**, Wayne, Nebraska, President; **M. F. Morton, M.D.**, Estherville, Iowa, Vice-President; **Edward Sibley, M.D.**, Sioux City, Iowa, Secretary; **Anton Hyden, M.D.**, Sioux Falls, South Dakota, Treasurer.

NEUROLOGISTS TO MEET

The American Academy of Neurology is holding their first interim meeting in Cincinnati on April 14 and 15, 1950. The meeting this year is being held in conjunction with the American Chapter of the International League Against Epilepsy which are meeting on April 15 and 16. On April 15 there will be a joint meeting between the two societies and a large symposium on psychomotor epilepsy.

MEDICAL SECRETARY LIST 12-POINT ACTION

R. G. Mayer, M.D., secretary of the South Dakota

State Medical Association listed for publication the action of the Association in implementing the A.M.A.'s 12-point program.

In a letter to **W. W. Bauer, M.D.** of the A.M.A.'s Bureau of Health Education, Dr. Mayer said;

"I believe that the one most outstanding achievement of the South Dakota State Medical Association under the 12-point program has been under point No. 3, Voluntary Insurance. A Special Committee on Prepayment Insurance Plans of the South Dakota State Medical Association developed the South Dakota Injury-Illness Expense Plan, a plan of insurance against the cost of hospital, surgical and medical care, designed, sponsored and supervised by the South Dakota State Medical Association and granted the seal of acceptance of the American Medical Association. The Plan is made available to groups and individuals on a voluntary basis through well established, licensed companies. The benefits to patients are more liberal than those of most other plans.

Other activities of the South Dakota State Medical Association which tend to bring about the realization of the 12-point Program of the A.M.A. are as follows:

5. New Facilities. Cooperation with the National Hospital Survey and Construction Act, one of our members being a member of the State Board. Encouraged various localities to develop facilities with local funds.

6. Public Health. Coopera-

tion with State Board of Health and local public health units in communicable disease control, maternal and child hygiene, clinics, etc., and agitation and endorsement to increase remuneration of public health officials.

7. Mental Hygiene. South Dakota State Medical Association, and especially Executive Secretary, helped in organization of South Dakota Mental Health Association.

8. Health Education. Medical Association cooperating with the South Dakota State Government and the Atomic Energy Commission and National Security Resources Board in educating the doctors for defense against atomic attack. Cooperation of the Medical Association with the State Board of Health and County Boards of Health in Radio Programs, etc.

10. Veteran's Medical Care. The South Dakota State Medical Association entered into an agreement with the Veteran's Administration in 1946 for a plan for the home-town care of veterans with the physicians of their choice.

11. Industrial Medicine. Our Rural Health Committee has been cooperating with the South Dakota Farm Bureau in striving for the reduction of farm accidents, etc.

12. Medical Education. Our Committee on Medical School Affairs and the Medical Association as a whole supported and fought for new facilities, personnel and buildings, and increased appropriations by the State Legislature for the Medical School of the University of South Dakota, and have also set up an Endowment Fund for the Medical School."

ABERDEEN DISTRICT HEARS McVAY

C. B. McVay, M.D., Yankton surgeon was the principle speaker at the regular meeting of the Aberdeen District Medical Society held at the Alonzo Ward Hotel, Tuesday, March 21. Twenty-seven members of the Society were present to hear Dr. McVay's discussion of hernia repair.

Discussing the A.M.A.'s National Education Campaign was **W. F. Mitchell** of Whitaker and Baxter's Chicago office who was in the State working on obtaining more resolutions against compulsory health insurance.

J. C. Foster, Association executive-secretary gave a brief talk on the Coop hospital and clinic at Winner.

Dr. John Rodine presided at the meeting.

World Medical ASS'N MEETS

To obviate the recurrence of certain hardships and limitations suffered in previous wars by physicians of the Armed Services who fell into enemy hands, The World Medical Association reported March 18 that it is laying plans to have all nations fix a status for the captured doctor which, while entitling him to the formal rights of a prisoner of war, will not actually designate him as one.

This announcement was made by Dr. Louis H. Bauer, Secretary General of the Association at its world headquarters in the New York

Academy of Medicine, 103rd Street and Fifth Avenue.

The Secretary General of the Association will be one of five Americans attending the annual meeting of the organization's Council April 24-28 in Copenhagen, Denmark where the doctor-war prisoner issue is expected to be discussed.

In discussing the status to be sought for the enemy-interned physician, Dr. Bauer pointed out that his organization will base its position on resolutions made in Stockholm, Sweden, last August by the International Committee of Military Medicine and Pharmacy. These stipulated that "the intangible principle of non captivity of the sanitary staff has to be fixed as an elementary basis . . . for the protection of wounded people and prisoners." Emphasizing that "in no case should its (that is, the sanitary staff's) members be treated as prisoners of war" these Stockholm resolutions said that the staff's extended immunity "should be recognized not as a personal privilege, but as a functional and social necessity in the interest of mankind." The final outcome of the deliberations in Stockholm was the following recommendation:

"Retained personnel shall not be deemed to be prisoners of war, but shall enjoy all the rights of the latter." Furthermore, there has been added: "Belligerents shall see to it that this personnel receives the same allowances and the same pay as does the

corresponding personnel in their army."

The World Medical Association, Dr. Bauer explained, represents the doctors and national medical associations of the world. It concerns itself primarily with medical care and promotes high standards of medical education and practice on a global basis, effects a better liaison among the doctors of the world, and promotes the betterment of international relations. The Association is supported entirely from voluntary contributions and it has only professional memberships.

The World Health Organization, on the other hand, is a subsidiary of the United Nations and, as such, represents the governments of the world. It is chiefly interested in Public Health and its membership is non-medical as well as medical. This organization is financed exclusively by governmental appropriations.

MITCHELL DISTRICT MEETS APRIL 3

The Mitchell District Medical Society met at Methodist State Hospital at 6:30 P.M., Monday, April 3. Twenty members attended the business session which took up a discussion of plans for the Annual Meeting.

Other business concerned the approval of Corsica and Kimball as emergency areas for D. P. doctors and announcement of the AAPS Essay Contest.

EMPLOYMENT OPPORTUNITIES FOR CIVILIAN MEDICAL PERSONNEL IN THE PACIFIC ISLANDS

The President has decided that Administrative responsibility for Guam and American Samoa, which are U. S. possessions, and for the Trust Territory of the Pacific Islands, which comprises the former Japanese Marshall, Caroline, and Marianas Islands, will be transferred from the Navy Department to the Department of the Interior. An Executive Order makes this transfer of responsibility effective on Guam on July 1, 1950. The transfer in American Samoa and the Trust Territory is scheduled to take place on July 1, 1951.

It is planned that naval officers and enlisted personnel serving in these island governments will be replaced with civilians before the transfer dates. Each island area has hospital facilities, small island or village dispensaries, and public health organizations. Medical work in these islands, in view of the great need for health services, the varied nature of medical problems, and the differing cultures of the people, offers an important challenge to doctors and other medical personnel.

Guam has a population of about 75,000, of whom 27,000 are Guamanians. The Guam Memorial Hospital, a tem-

porary structure with 250 beds, including TB wards and a staff of nine medical officers, serves primarily the Guamanian population. It is operated by the Guam Government and shares some facilities in common with the adjoining naval hospital. In this medical center are schools for native medical assistants, dental assistants and nurses, which are attended by Guamanians, Samoans and Trust Territory islanders. It has been planned that a permanent, fully-equipped hospital will be built for civilians in Guam in the near future.

American Samoa has a population of over 19,000, almost all of whom are Samoans. The island government maintains a 200-bed hospital, built in 1945-46, and a staff of five medical officers. Since 1912, a training school for Samoan registered nurses has been in operation.

The Trust Territory has been under American administration since the occupation of the islands during and after World War II. The territorial government has established six 50-75 bed general dispensaries, each with a staff of two or three medical officers. These hospitals or dispensaries are located at Saipan in the Marianas, Yap and Koror in the Western Carolines, Truk and Ponape in the Eastern Carolines, and Majuro in the Marshalls. In

the smaller islands health work is cared for by native health and nurse aides. A small leprosarium is maintained at Tinian in the Marianas.

In establishing medical positions for the governments of these three areas, the Department of the Interior will follow federal classifications, but applicants need not be on a Civil Service register to be eligible for appointment. Positions for physicians, public health officers, hospital administrators, laboratory technicians, pharmacy technicians, and nurses are available. Salaries for doctors will range from \$6,400 to \$8,800 per annum. A post differential of 25% in addition to salary is allowed at present for employees stationed in the islands. Transportation is paid for employees and their dependents. Housing is excellent in Samoa and, though of an advanced base type in Guam and the Trust Territory, is adequate for tropical conditions. Houses are furnished and rents are reasonable.

Further information regarding opportunities for health work in the Pacific Islands can be obtained from the Division of Territories and Island Possessions, Department of the Interior, Washington 25, D. C.

SURVEY OF PHYSICIANS' INCOMES

Chicago — Late in April the Bureau of Medical Economic Research of the American Medical Association and the Office of Business Economics of the U. S. Department of Commerce will jointly conduct a survey of physicians' incomes.

The Bureau has been authorized by the A.M.A. Board of Trustees to cooperate in this survey, which the Department of Commerce had planned to conduct alone. It will be the first full-scale survey of the department of physicians' incomes since 1941.

An analysis of the results will be published by the Department of Commerce next fall in its monthly publication, "Survey of Current Business." Its August 1949 and January 1950 issues had published similar analysis of surveys of incomes of dentists and lawyers, respectively, made jointly with the American Dental Association and the American Bar Association.

There is evidence that the national averages in some surveys have been too high because physicians who do not have bookkeepers to fill out questionnaires do not reply in sufficient numbers. Accordingly, the Bureau emphasizes the importance of all doctors, especially those with a relatively small practice, filling out the questionnaires.

Accurate postwar data on physicians' incomes is badly needed in order to develop better estimates of how much the American people pay to physicians.

Every physician can be assured that the survey has no relation whatever to the operation of the U. S. Bureau of Internal Revenue. There is no way by which the Department of Commerce could have obtained the needed information from the Bureau of Internal Revenue; hence, the questionnaire survey.

There will be two questionnaire forms. The Bureau of Medical Economic Research helped to design these. A short form will request income data for 1949 only. A long form questionnaire will cover the years 1945 through 1949. All are to be returned unsigned in franked envelopes.

The punch card files of the Bureau of Medical Economic Research contain the names of about 200,000 physicians. The survey will cover 125,000 of these, or 62½ per cent of the total. Selection will be by a formula which eliminates any partiality.

A short form will be sent once only to **every other**

name in the file. Of the remaining 100,000 names, every fourth will be selected. To these will go 10,000 short forms and 15,000 long forms, with this distinction — the return franked envelopes will carry a code number which will identify the physician to the Bureau of Medical Economic Research alone. All of the addressing will be done in the headquarters of the A.M.A.

The sole purpose of the code number is to enable the Bureau of Medical Economic Research to address a follow-up letter to those not replying to the first request. Physicians need have no suspicion about the code number because when the reply is received, the questionnaire will be separated immediately from the envelope and the identity will be lost.

Physicians will be doing the medical profession a service by filling out the forms and returning them as soon as possible.

Medical Convention Huron

May 21-22-23



Pharmacy Convention Sioux Falls

June 13-14-15

PHARMACEUTICAL DIVISION

BLISS C. WILSON, Editor

MODERN THERAPEUTIC AGENTS

by Edgar Parry, Instructor in Pharmacy
South Dakota State College

Oral Undecylenic Acid

Undecylenic Acid is a straight chain, weak, unsaturated, fatty acid normally found in human sweat. It has been used topically in the treatment of athlete's foot and ringworm infections where it has been proven to have definite fungicidal activity.¹ However, in treating a case of tinea capitis, or the type of scalp ringworm found in children, undecylenic acid was found ineffective. This was thought to be due to the fact that the causative agent was imbedded inside the hair follicle and inaccessible to the acid. At the same time it was reported that at the start of puberty, the sebaceous glands produced higher concentrations of certain fatty acids, such as undecylenic, caprylic, and propionic acids that had fungicidal properties against this causative agent.

Perlman decided to experiment with oral administration of undecylenic acid, since in local application it showed low toxicity and was representative of fatty acids secreted by these glands.² After finding it relatively non-toxic when given orally to animals, he tried one gram daily doses on four children with scalp ringworm. The results were encouraging, but it did not produce an ultimate cure. Treatment was stopped until more data on the nature of its toxicity was available.

Later, using a highly purified undecylenic acid, Perlman gave seven and one half gram daily oral doses to patients suffering from psoriasis. Its first effect was exfoliation of the scalp which started within the first two days of treatment and continued up to, and in some cases beyond, the end of treatment. Simultaneously, the psoriatic lesions began to heal. The scales dried and peeled off leaving a reddened area which gradually disinte-

grated. The subacute type lesion healed rapidly, while the chronic localized type healed slowly for a while, then stopped, and then mysteriously disappeared when therapy was discontinued. Itching stopped quickly. This prompted Perlman to try it on cases of neurodermatitis. He found that it relieved the itching for eight patients when given in doses of from one half to two and one half grams three times a day.

Psoriatic patients suffering from arthritic pains experienced complete relief while under undecylenic acid therapy. This suggested that since the arthropathies of arthritis and psoriasis are closely associated, it might be effective against arthritis. On four cases treated it reduced joint swellings, reduced the subcutaneous nodules, and lessened joint pains.

The action of oral undecylenic acid which produces desquamation, or brings about clinical changes is not understood. Other reports confirm Perlman, that it is indicated in psoriasis, neurodermatitis, and possibly arthritis. It is a slow acting drug — may require six months treatment for psoriasis. More research is needed to determine its full usefulness and its limitations. Undecylenic acid for oral administration* is specially purified and is not the same as the ordinary acid used in skin infections which varies in chemical composition.

The disadvantage of being slow in action is offset by its low toxicity. Experiments reported by Schering Laboratories showed that rats and mice, when given daily doses exceeding those recommended for human use in

* Available under the name of Declid from Decyl Pharmacol Co., Princeton, New Jersey; and as Sevinon from Schering Corp., Bloomfield, New Jersey.

psoriasis and extended over six and nine months periods, exhibited normal body growth and raised healthy litters when mated at the end of the experimental periods.³ Perlman showed also that the largest quantities that could be conveniently force fed to mice failed to kill the animals.²

Side effects include belching, nausea, and bad taste in the mouth. This was overcome by encapsulating the acid. Side effects which disappeared after a short time, even though medication was continued, included frontal headache, diarrhea, folliculitis, conjunctivitis, and frequent micturation. No abnormalities were noted in blood pressure, heart action, temperature, pulse rate, and urinalysis.

Antihistamine or "Anti-Hyaluronidase"

One type of allergic manifestation which has long been an embarrassing problem to dermatologists and an irritating one to those affected with it, is the poison ivy-type dermatitis. There is at present no drug which can be relied on to relieve it, and likewise there is very little known about the active substance in poison ivy, namely toxicodendrol. Lead salts will precipitate it, and it oxidizes slowly in air to an inert substance but there is no drug or chemical known that will inactivate it. Vitamin C has been used with conflicting reports; the antihistamines may help relieve itching.

Dr. Howard T. Behrman, Assistant Clinical Professor of Dermatology, New York University College of Medicine, suggests that many of the allergic manifestations which are not responsive to antihistamines, or only minimally, like poison ivy, may be due to liberation by the skin and tissue of hyaluronidase rather than histamine.⁴ Hyaluronidase is the enzyme which hydrolyzes hyaluronic acid, a constituent of cell walls. The result is a breakdown of the cell walls to the extent that bacteria toxins, dyes, or any substance given by hypodermoclysis, spreads easily through the tissue under the skin.

If poison ivy and other allied sources of dermatitis fall into the category of hyaluronidase liberators, then research on therapy for this type of dermatitis must be directed toward finding an antihyaluronic substance. If this concept is true, it explains also why antihistamines are not specific against all forms of dermatitis. When the source of allergy causes more histamine than hyaluro-

nidase to be liberated, antihistamines are specific; but when the source of dermatitis causes the skin to liberate more hyaluronidase than histamine, the antihyaluronidase would be specific, and antihistamines would have little effect.

Specific proof of Dr. Behrmans hypothesis must await the finding of a drug which is antihyaluronidase in action.

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3. Tinslow, R., Margolin, S., Foley, E. J., and Lee, S. W. Toxicity of Undecylenic Acid (a paper) reported in *J. Pharm. and Exper. Therap.* 98:31 (1950).
4. Behrman, Howard T., M.D., Research Progress in Dermatology, *Am. Prof. Pharm.* 15; 347 (1949) As adopted from an address made by Dr. Behrman.

A. Ph. A DISTRICT MEETINGS

Washington, D. C. (Mar. 20) — Experimenting in taking the activities of a national organization directly to its membership, the AMERICAN PHARMACEUTICAL ASSOCIATION recently organized district meetings in Chicago and St. Louis. Local branches of the ASSOCIATION in both cities cooperated with ASSOCIATION officers in arranging the meetings.

A team of speakers including President Glenn L. Jenkins, who presided at both meetings; Secretary Robert P. Fischelis; Dr. Austin Smith, editor of the *Journal of the American Medical Association*; Dr. Paul L. Wermer, assistant secretary of the Council on Pharmacy and Chemistry of the American Medical Association; Dr. Hugh C. Muldoon, former chairman of the A. Ph. A. House of Delegates and dean of the Duquesne University School of Pharmacy; and Mr. Don Francke, director of the A. Ph. A. Division of Hospital Pharmacy and chief pharmacist of the University of Michigan Hospital, furnished the programs.

Reports of the meetings in the March issue of the **Practical Pharmacy Edition** of the *JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION* are indicative of the success of the experiment. The ASSOCIATION anticipates requests from other areas to arrange similar meetings in the interim between the annual conventions.

NEW BOARD OF PHARMACY REGULATIONS

At a meeting held in Brookings, April 4, the Board of Pharmacy adopted the following new regulations to become effective on June 1, 1950.

BUYING AND SELLING DRUGS, MEDICINES AND POISONS FOR RESALE

1. Persons, partnerships or corporations who are not licensed by the State Board of Pharmacy, may sell drugs, medicines or poisons only for the purpose of resale. (NOTE: SDC 27.1013 prohibits the retail sale of all drugs, medicines and poisons except by registered pharmacists and dealers licensed by the State Board of Pharmacy.)

2. "Retail sale" or "sale at retail" means the sale of any drug, medicine or poison to the consumer or user thereof, or to any person, partnership or corporation for any purpose other than for resale.

3. Any sale, within this state, of any drug, medicine or poison by any manufacturer, wholesaler, distributor or individual wholesale salesman or vendor, to any person, partnership or corporation doing a retail business but not a wholesale business within this state, unless such person, partnership or corporation is duly licensed in this state to keep for sale and to sell such drug, medicine or poison at retail, will be regarded as a sale for purposes other than for resale. Any such sale is a retail sale.

4. Any manufacturer, wholesaler, distributor or individual wholesale salesman or vendor who sells, or otherwise disposes of any drug, medicine or poison to any person partnership or corporation doing a retail business within this state, shall first determine if such person, partnership or corporation is licensed by the State Board of Pharmacy to keep for sale and to sell such drug, medicine or poison at retail. (NOTE: Any wholesaler or his representative may obtain a current list of REGISTERED PHARMACIES, PATENT MEDICINE LICENSEES, HOUSEHOLD REMEDY LICENSEES and/or POISON LICENSEES by requesting same from the Board of Pharmacy, Pierre, S. Dak., or licensees may be determined from license displayed in the retailer's place of business or by license number shown on wholesale purchase order as required in Board regulations.)

5. Any person licensed by the Board of Pharmacy to keep for sale and to sell at retail in original packages, patent and proprietary medicines, shall enter or cause to be entered upon his wholesale purchase order for such medicines the NUMBER of his current Patent Medicine License, as, "S. D. Patent License No. 00."

6. Any manufacturer, wholesaler, distributor or individual wholesale salesman or vendor who sells, or otherwise disposes of any patent or proprietary medicine to any person licensed by the Board of Pharmacy to keep for sale and sell such medicines at retail, shall enter upon his invoice for such medicines to such licensee the NUMBER of that licensee's current Patent Medicine License as shown on the wholesale purchase order therefore and in the following form—"S. D. Patent Licensee No. 00."

7. Any person licensed by the Board of Pharmacy as a dealer in certain selected household remedies, shall enter, or cause to be entered upon his wholesale purchase order for such selected household remedies the NUMBER of his current Household Remedy License and also his REGISTRATION NUMBER as shown thereon, as "S. D. Household Remedy License No. 00, Reg. No. 00."

8. Any manufacturer, wholesaler, distributor or individual wholesale salesman or vendor who sells, or otherwise disposes of any household remedy to any person licensed by the Board of Pharmacy as a dealer in such selected household remedy, shall enter upon his invoice for such household remedy to such licensed dealer the NUMBER of that licensed dealer's current Household Remedy License and also that licensed dealer's REGISTRATION NUMBER as shown on the wholesale purchase order therefore and in the following form—"S. D. Household Remedy License No. _____, Reg. No. _____."

RATING SCHOOLS OF PHARMACY

Washington, D. C. (Mar. 20) — "The American Council on Pharmaceutical Education has won acclaim among critics of accrediting agencies because of the sane and sympathetic approach which it has made to the problem of accrediting colleges of pharmacy."

This evaluation of the accreditation procedure of the Council appears in an editorial

of the March issue of the **Practical Pharmacy Edition** of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION by Dr. Robert P. Fischelis, secretary of the ASSOCIATION. In the same issue, an article by Dr. E. C. Elliott, Acting Director of Educational Relations of the Council, states that the Council "has been and will continue to be a vitalizing, constructive force for the betterment of pharmaceutical education and practice."

Even though individual institutions are being notified of the results of inspections made by representatives of the Council, no list of accredited colleges of pharmacy with their classifications will be made public until the entire job of rating is completed and this, according to the editorial, is likely to take all of 1950 and may continue well into 1951.

"A", "B", "C" and "Y" classifications set up for rating accredited colleges under the revised standards of the Council are degrees of accreditation devised to stimulate the authorities of the colleges to raise their standards and facilities to the full minimum requirements of the Council. "Y" is a temporary rating for newly established colleges. Class A colleges are those "showing no important deficiencies in comparison with the requirements for accreditation." Class B colleges are those "having deficiencies that could be corrected promptly by administrative action." Class C colleges are those "having deficiencies which would take considerable time and effort to correct."

"Whenever the ratings of the various schools are published," Dr. Fischelis emphasizes, "it should be remembered that every school receiving a rating is an accredited college of pharmacy." Schools which do not reach the minimum standards prescribed will be recorded as non-accredited institutions.

"YOU MUST HELP REPEAL EXCISE TAX"

Druggists must help in order to bring about the repeal of the unfair and detrimental excise tax on toiletries, according to John W. Dargavel, executive secretary of the N.A.R.D., in his editorial message in the March 20 issue of the N.A.R.D. Journal.

Mr. Dargavel goes on to say:

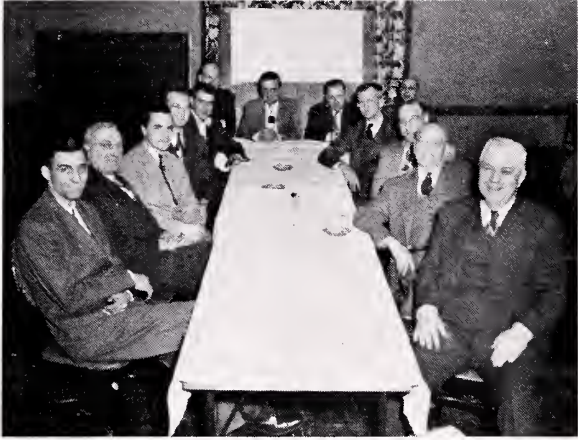
"It is important for you to impress on your respective representatives in Congress that

the levy has been allowed to continue much too long and that it has become a serious damper on business in every section of the United States.

"The N.A.R.D. has argued the case against the toiletries tax before the Ways and Means Committee of the House. It is there that the action for repeal of the levy will center. We will leave nothing undone to convince the lawmakers of the necessity to put an end to the excise tax on toiletries. Nevertheless it is urgent for you druggists to convey your personal opinions to the members of Congress. Your views on proposed legislative measures count for more than you may realize. Accordingly I urge you to file strong protests against further delays of action on the repeal of the toiletries tax. You druggists know well the effects of the levy and it is important for you to see to it that the lawmakers are provided with the facts you have available from the experience of drug store operation. It is effective to have the information come right from constituents of the individual members of Congress.

"The Ways and Means Committee of the House consists of the representatives as follows: Robert L. Doughton of South Carolina, Jere Cooper of Tennessee, John D. Dingell of Michigan, Wilbur D. Mills of Arkansas, Noble J. Gregory of Kentucky, A. Sidney Camp of Georgia, Walter A. Lynch of New York, Aime J. Forand of Rhode Island, Herman P. Eberharter of Pennsylvania, Cecil R. King of California, Thomas J. O'Brien of Illinois, J. M. Combs of Texas, Hale Boggs of Louisiana, John A. Carroll of Colorado, Stephen M. Young of Ohio, Daniel A. Reed of New York, Ray O. Woodruff of Michigan, Thomas A. Jenkins of Ohio, Richard M. Simpson of Pennsylvania, Robert W. Kean of New Jersey, Carl T. Curtis of Nebraska, Noah M. Mason of Illinois, Thomas E. Martin of Iowa, Hal Holmes of Washington and John W. Byrnes of Wisconsin.

"Many of you druggists live in the respective districts of the members of the Ways and Means Committee. They are certain to give particular attention to the personal opinions you express relative to the excise tax on toiletries. It will be of material assistance in connection with the efforts to bring about the repeal of the levy for you to contact these members of Congress."



Committee Planning Annual Meeting for Pharmaceutical Convention, June 13, 14, 15.

SPECIAL SCIENCE FEATURE SERVICE

Gold Therapy for Arthritis

Successful treatment of rheumatoid arthritis with weekly low-dosage, low-cost injections of gold compounds offers greater hope today than treatment with scarce and costly cortisone and ACTH, according to two nationally famed rheumatologists.

Dr. Russell L. Cecil, of Cornell University Medical College in New York, told the Clinical Society of the New York Polyclinic Medical School and Hospital that while cortisone and ACTH act quickly to relieve arthritic pain and swelling, the new compounds must be injected daily, that they are costly and in short supply, and that there is evidence of undesirable side effects requiring more investigation.

"On the other hand," said Dr. Cecil, "gold compounds like Solganal, although requiring slightly longer to provide relief, cause a remission of symptoms in about 60% of patients when treatment is begun early. The remission lasts six months to a year and may be permanent. Only 25 milligrams weekly is required, and this costs very little."

Dr. William B. Rawls, of the Polyclinic staff, said cortisone and ACTH serve merely as "crutches" for arthritic patients. He urged physicians not only to maintain gold therapy with Solganal, Myochrisin and other preparations, but told them also that at present, gold treatment cannot be discarded.

Simple, Accurate Pregnancy Test

Clinical, skin and animal tests to establish

the presence or absence of pregnancy, up to now, have been either not wholly accurate or too slow in furnishing results, but Dr. Harold A. Schwartz, of Chattanooga, Tenn., reports successful use of a new preparation, Prometron, that gives positive results in a few days.

Reporting his tests with Prometron, a combination of estradiol benzoate and progesterone, in the American Journal of Obstetrics and Gynecology, Dr. Schwartz said that in 56 cases, normal menses resulted for 26 women in which pregnancy was absent, and normal pregnancies followed positive results in 30 cases.

Pre-natal Blocking of Rh Factor

Expectant mothers whose blood tests "Rh negative," in the language of medical science, show the greatest tolerance to lose babies before birth, suffer still births, or bear infants with greatly diminished chances of living. Two California physicians now report a new method of blocking the influence of the "Rh negative factor" before birth, during the period when the blood supply of mother and child is shared.

Dr. Philip B. Hoffman and Dr. D. Ermorene Edwards, of the Marysville, Cal., clinic, state in the American Journal of Obstetrics and Gynecology, that 50 women who tested "Rh-negative" and whose husbands were "Rh-positive" were given daily small doses of Pranone, a female hormone preparation, and weekly injections of vitamin K, during the pre-natal period.

All 50 mothers had children with normal blood and showed normal or healthier blood streams themselves. Of three expectant mothers not treated with Pranone and vitamin K, two had children with abnormal white cell counts and one of these died.

Anti-Histamines 85% Effective

Anti-histamine chemicals used to stop colds and relieve symptoms of hay and rose fever, and foliage, pollen and food allergies, appear to be effective in 85 cases out of every 100, a summary of extensive research shows today.

Screening of a number of anti-histamine chemicals by thousands of physicians in more than 100,000 cases shows greatest relief for hay fever and pollenosis victims, with somewhat less dramatic relief in cases of asthma, migraine and other disorders. When tried in the stopping of colds, 85% of 6,776 patients responded to anti-histamine therapy.

Newest, most potent anti-histamine is Chlor-Trimeton, effective against allergies in doses of only 2 to 4 milligrams per tablet as against 25 to 100 milligrams of older anti-histamines. In colds, 2 milligrams of the new anti-histamine are combined with three other chemicals in Coricidin tablets prescribed by physicians. Of anti-histamines available without prescriptions, the lowest dosage is Inhiston's 10 milligrams of propenpyridamine.

Rules for Sun-tanners

Warning that baby oils many sun-worshippers use hopefully to achieve a tan actually contain no protection against the sun's burning rays, medical authorities recommend that Spring, Summer and Fall vacationers select sun-filter lotions or creams scientifically compounded and bearing the approval of the American Medical Association.

The "trick" in tanning is "to get the most brown with the least burn," and to do this it is essential that some ingredient like the hydroquinone used in Sutra, an AMA-approved preparation, be used to block out the short ultra-violet burning rays of the sun while permitting longer tanning rays to penetrate the skin and bring out the pigment change that produces tan.

To be safe in sunlight anywhere from Spring onward, authorities say an approved sun-filter preparation is the answer, plus observance of time-tested rules such as short "first exposure," properly clothed arms and legs when near bodies of water that reflect ultra-violet light, and realization that clouds, fog and mist are no protection against the sun's burning rays.

Bulk Producers for Intestines

Most of the "terrible consequences" associated with reluctant intestines never happen if harsh cathartics are avoided and smooth, soft, non-irritating bulk producers are taken when required by those needing mechanical assistance in establishing regular habits, medical men say.

One of the most frequently prescribed bulk producers is a vegetable compound consisting mostly of Bassorin, an imported Indian gum, which, in Saraka pellets, swells in the intestine to 20 times its original size. Another new compound is methylcellulose in tablet form.

"Treat your colon kindly" by using only such bulk producers, says Dr. William Harley Glafke, New York gastro-enterologist, in

Reader's Digest. In "Better Health," Dr. C. R. Everitt says the same. Their view is that of physicians generally.

STATUS OF CORTISONE AND ACTH

Washington, D. C. (Mar. 20) — Although cortisone and ACTH often provide prompt and dramatic relief in arthritis, gout, and certain other diseases, according to the Council on Pharmacy and Chemistry of the American Medical Association "the improvement is maintained only as long as the administration of the drug is continued." In a report appearing in the March issue of the **Practical Pharmacy Edition** of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION the Council discusses the use of both cortisone and ACTH which were first tried in 1948 at the Mayo Clinic.

Dangers involved in the use of such therapy are pointed out, and its restricted use is shown in the article. Currently both cortisone and ACTH are distributed only to qualified investigators.

"In the present state of our knowledge it would be extremely undesirable," the Council warns, "to permit the widespread use of these potent preparations in the routine practice of medicine, and it is perhaps fortunate that neither drug is now available in unlimited quantities. Because of the limited amounts of both drugs presently available, their use must be restricted to those instances where they will aid in the understanding of the mechanism of a disorder."

LIPOTROPIC THERAPY

Washington, D. C. (Mar. 20) — Not so long ago, diagnosis of cirrhosis of the liver was tantamount to a death sentence. Today the outlook for cirrhotic patients is more hopeful.

"Lipotropic Therapy," by Allen Klein, appearing in the March issue of the **Practical Pharmacy Edition** of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION discusses the pattern of intensive therapy now used in liver disorders. One step in the therapy is "administration of specific lipotropic agents such as choline, methionine, and inositol," which Mr. Klein defines:

"Choline is a component of the vitamin B complex and the lecithin molecule. Methion-

ine is one of the only two sulfur-containing amino acids, as available in casein and other protein-containing products. Inositol is a member of the Vitamin B complex and has almost universal distribution in plant and animal tissues."

Pointing out that lipotropic factors are substances which favor normal metabolism of fats and are vital to hepatic function, Mr. Klein describes how the lipotropic agents work. "Choline, methionine, and inositol transform the fats obtained from the diets into phospholipids, substances which are readily metabolized and absorbed into the blood stream." This therapy prevents the atrophy and shrinkage of the liver.

In addition to their therapeutic use in liver disorders, the article brings out the current interest in application of choline, methionine, and inositol "in the prevention and possible reversal of the arteriosclerotic process," and possible promise in the "treatment of the great killer, coronary arteriosclerosis."

As for the toxicity of the lipotropic factors, Mr. Klein is reassuring. Because choline, methionine, and inositol are food factors, he says they are essentially nontoxic.

GENERAL CIRCULAR NO. 195

Subject: Bureau Policy Regarding the Safeguarding of Retail Dealers' Narcotic Stocks.

At its recent 51st annual convention the National Association of Retail Druggists adopted the following resolution:

"WHEREAS there have recently occurred numerous burglaries in drug stores throughout the nation involving narcotics, and

WHEREAS the present method of segregation of narcotics and padlocking of same required by present regulations make it easy for burglars or addicts to locate them and requirements are of material aid to the burglars and addicts and serve no useful purpose in safeguarding narcotics; therefore, be it

RESOLVED by the National Association of Retail Druggists that it request the United States Treasury Department to modify regulations to the effect that segregation and padlocking of narcotics would not be required of the pharmacist."

The Bureau's regulation regarding the protection of narcotic stocks is found in Article 193 of Regulations No. 5 which states "Narcotic drugs and preparations shall at all times be properly safeguarded and securely kept where they will be available for inspection," etc. The exact manner in which the drugs shall be stored is nowhere prescribed by regulation but in all cases emphasis should be placed on the responsibility of the retailer to see that his narcotics are always "properly safeguarded" and "securely kept."

Narcotic officers are repeatedly asked what constitutes adequate safeguarding. The accumulated experience of these officers based on their investigations of many drug store thefts over a long period of years leads to the almost unanimous conclusion that the greatest security for a retail narcotic stock is provided by keeping the drugs locked at all times in a strong safe, substantial enough to deter entry and heavy enough to prevent its being carried away. This, therefore, is the first recommendation of the Bureau in all cases.

A chest or safe meeting Underwriters Laboratories' requirements for an X-60 rating is designed to offer protection against attack by tools or explosives for a period of one hour; one with a TR-60 rating protects against tools or torch, and one with a TX-60 rating protects against tools, torch or explosives, for the same period of time. A safe with any of these ratings, or of equivalent construction, is considered a strong safe.

For small stocks the Bureau has occasionally, though reluctantly, accepted lighter safes with only a T-20 rating. This type of safe is built to resist attack by ordinary burglars' tools only, and only for a period of 20 minutes. While better than no safe at all it offers only a bare minimum of protection. Although sometimes insisted upon as a minimum requirement it is never recommended as adequate and certainly is not adequate for the safekeeping of a narcotic stock of any appreciable size or value.

Any safe weighing less than 750 pounds should be securely anchored in concrete or to the floor or wall to prevent its being carried away. If bolts are used they should be completely imbedded so they cannot be readily reached and cut, sawed or unbolted.

If for any reason a satisfactory safe is not

available the druggist should exercise extreme care to purchase only the quantities of narcotics immediately required, keeping his stock at the absolute working minimum. This "working stock" may be distributed and concealed throughout the general stock provided care is taken to place the drugs where salesmen, deliverymen or other chance visitors cannot see them and where customers bringing narcotic prescriptions to be filled cannot observe the locations from which the ingredients are assembled. While this method, i.e. distribution and concealment, is preferable to segregation and storage in a single, unprotected place such as a wooden drawer or light metal cabinet, it is nevertheless a poor substitute for adequate protection in a strong safe.

Retailers are therefore urged to:

- (1) Provide a strong safe for all narcotic stocks (which can also be used for other valuable property); or, when this cannot be done,
- (2) Keep only the absolute minimum working stock, scattered and hidden where it cannot be seen or found without expenditure of considerable time and effort. This method is satisfactory only for very small quantities. Any appreciable stock stored in this manner is regarded as a negligent handling of narcotic drugs.

H. J. ANSLINGER

COMMISSIONER OF NARCOTICS

NEWS ITEMS

Floyd M. Cornwell, President and **Bliss C. Wilson**, Secretary represented the South Dakota Board of Pharmacy at the Fifth District National National Association of Boards of Pharmacy held at the Hotel Nicolle, Minneapolis on March 18, 19, 1950.

H. P. Hemmingson, 77, pharmacist of Highmore for the past forty-seven years, has sold his drug store to **Mr. Kenneth D. Tomter** a graduate of the Division of Pharmacy at South Dakota State College. Mr. Tomter, who was formerly with the Walgreen Drug in Aberdeen, took possession at Highmore on April 17th. Mr. Hemmingson has been in poor health and will retire. He is happy to turn the business over to a young man who called Highmore his home prior to 1948.

The druggists of Aberdeen and surround-

ing territory organized the Aberdeen District Pharmaceutical Society on March 17th, at the Sherman Hotel Basement Banquet Room. Eighty-six persons interested in wholesale or retail pharmacy attended the Banquet Meeting. **A. L. Bittner** was elected president of the new organization and **Si Mark**, Vice-President. From the enthusiasm displayed at their first meeting, we predict that the new society will meet its objectives to promote education in the business and profession of pharmacy for employer and employee alike and to foster co-operation in local drug business problems.

W. G. Abbott of Onida returned recently from a trip to the west coast states. He is interested in reciprocal licensure to Oregon and says that he may move out there later this year.

The **Casey Drug Store** at Chamberlain suffered considerable damage by smoke, fire and water when an adjacent lumber yard and the top story of the building in which the drug store is located were completely destroyed by fire on April 7th.

The Board of Pharmacy adopted new rules and regulations pertaining to the buying and selling of drugs, medicines and poisons for resale, at their meeting held in Brookings on April 4th.

The **Larrison Pharmacy** at Mitchell has been discontinued because the owner, Martin Osterhaus, was unable to negotiate a satisfactory lease with his landlord. Practically everything in the store was sold in a "Quitting Business Sale." We understand that pharmacists, **Robert Den Beste** and his son **Gene** will open a new pharmacy at the location vacated by Martin Osterhaus. The Den Bestes are now located at Corsica.

The **Davis Pharmacy** at Vermillion is being completely re-modeled. Your secretary visited this pharmacy recently when he was in Vermillion to take part in the Fight For Life radio broadcast over KUSD.

The druggists of Sioux Falls have made elaborate plans for your entertainment at the South Dakota Pharmaceutical Association convention to be held in their city on June 13, 14, 15, 1950. Arrangements have already been made for all of the convention speakers. Make your plans NOW to attend our biggest convention ever held in South Dakota. Write Carl Anderson, Local Secretary, 814 S. Covell Avenue, for reservations.

Convention

S. Dak. State Pharmaceutical Association

Sioux Falls, S. Dak.

June 13-14-15

Nationally Known Speakers

Barbecue, Picnic and Sports Events

Big Travelers Party - - Country Club

Banquet and Dance

Make Reservations Now!

AUXILIARY ACTIVITIES



NATIONAL AUXILIARY OFFICIAL CHIEF CONVENTION SPEAKER

Mrs. Paul Craig, Reading, Pennsylvania, chairman of the Woman's Auxiliary to the American Medical Association's committee on public relations, will be the featured speaker at the Annual Meeting of the South Dakota Auxiliary in Huron, May 21, 22, and 23.

Mrs. Craig is well known throughout the country as an excellent speaker and organizer. She was born in Maryland, graduated from West Virginia University; took student dietetic training and later became dietitian at Reading Hospital.

She is married to Dr. Paul Craig, Reading ophthalmologist. They have a son and daughter of school age.

Mrs. Graig was the 25th President of the Woman's Auxiliary to the Medical Society of the State of Pennsylvania. She began her Auxiliary work in Berks County, first as program chairman of the Berks County Auxiliary and then becoming president in 1935. In 1937 she was named councillor of the Second District. In 1944, she was named corresponding secretary of the State organization and in 1946 became first vice-president. She became Chairman of the AMA Auxiliary Committee on Public Relations in June of 1949.

Mrs. Craig is a member of the American Dietetic Association, Delta Gamma, and the Daughters of the American Revolution. Her hobbies are books, people and geneology, which she pursues in her country home outside Reading and also in her travels.

Present plans call for Mrs. Craig to speak twice to the Auxiliary and once to the general session of the State Medical Association. The topic for her talk to the general session will be "The Auxiliary as a Public Relations Factor." Topics for the Auxiliary talks had not been set at time of publication.

EXECUTIVE BOARD MEETS

On March 30, 1950, the Executive Board of the Women's Auxiliary to the South Dakota State Medical Association were luncheon guests at the Town Club of Mrs. Wm. Sercl, State President.

After the luncheon, a meeting was held at Mrs. Sercl's home, 2021 South 1st Avenue, Sioux Falls, South Dakota. Those in attendance at the meeting were Mrs. A. Reding, Marion, South Dakota; Mrs. Anton Hyden, Sioux Falls, South Dakota; Mrs. Howard Wold, Madison, South Dakota; Mrs. Clarence Sherwood, Madison, South Dakota; Mrs. V. V. Volin, Sioux Falls, South Dakota; Mrs. James Y. Clarke, Sioux Falls, South Dakota.

The Executive Board were busy formulating and completing plans for the State Convention to be held in Huron, May 21-23.

ANNUAL MEETING

On this page you will find an invitation from the president of District no. 6, Mrs. W. H. Fritz, Mitchell, to attend the Annual Meeting of the Auxiliary in Huron, May 21, 22, 23. From all reports this will be one of the finest programs in recent years and your president urges all of you to attend all business sessions and social functions.

The high light of our meeting will be the appearance of Mrs. Paul Craig, Chairman of

the National Auxiliary Public Relations Committee. Mrs. Craig is well-known for her speaking ability and down to earth handling of factual material.

Put on your new spring bonnet,
With all the ribbons on it,
And dash into Mitchell in May,
Bring friend hubby in tow
And see the whole show
You're sure to enjoy your stay.

"AN INVITATION TO ALL DOCTORS' WIVES"

The South Dakota State Medical Association will hold its' annual meeting this year, in Huron, on May 21, 22 and 23. Why not accompany your husband to this convention and attend the Auxiliary sessions to be held on the same days? We would like very much to have you attend.

There will be a buffet supper for the Doctors' wives on Sunday evening, May 21st, at the Hughitt Hotel, and on Monday, May 22nd, there will be a bridge luncheon at the Huron Country Club.

Mrs. Paul Craig, Reading, Pa., from the National Auxiliary and Mrs. William Sercl, Sioux Falls, our State President, will be with us and we are hoping to have a good attendance.

Mrs. W. H. Fritz
President, Sixth District

(Continued from Page 108)

pear this year, and will be distributed bi-monthly to practicing physicians throughout the country. Topics of interest to the general practitioner will be presented in digest form, together with brief abstracts of significant papers appearing in the literature. Clarity, brevity and general interest will be stressed. It is the Society's hope that this digest will be accepted by the busy physician for whom it is planned.

The library of the Society publishes monthly a bibliography of the current cancer literature which is available on request to physicians, research workers and libraries. The library will prepare, on request, bibliographies on any topic related to the field of cancer. A package lending library has been established which will supply reprints, on a loan basis, to any physician or investigator requesting the service.



From where I sit by Joe Marsh

"Left-Handed Compliment"

See where a bank in Denver is putting in left-handed checkbooks. They figure their southpaw depositors deserve just as much consideration as the right handers.

Time was when it was believed left-handed people had no right to exist at all. If a youngster showed signs of using his left hand, his parents were supposed to break him of the habit—to force him to use his right.

But today most doctors will tell you that changing a child's natural left-handed tendency usually causes more harm than good. Stammering and other nervous disorders often get their start that way with children.

From where I sit, if a man wants to use his left hand—that's *his* business. It's not a good idea to make anyone do things our way, because *we* think it's right. Personally, I think a mellow glass of beer is the finest beverage on earth. If you happen to prefer a Coke—why, go to it! Only leave me the same freedom of choice, won't you?

Joe Marsh

Chloromycetin in the Treatment of Rheumatoid Arthritis

A Preliminary Report

E. E. Greenough, M.D., Sioux Falls, S. D.

It was casually observed in treating upper respiratory infection in patients afflicted with rheumatoid arthritis, that chloromycetin¹ gave marked relief of pain and suggestive improvement to the arthritic condition as well as being effective in controlling the upper respiratory infection.

After several such observations, a number of patients with rheumatoid arthritis were given small doses of chloromycetin for short periods of time. The observation of the response of these patients has suggested the possible value of chloromycetin in the treatment of this disease. However, it is to be understood that the information at hand is not at all complete, but suggestive enough to warrant a complete and intensive clinical investigation which is to be undertaken soon.

ETIOLOGY OF RHEUMATOID ARTHRITIS

The etiology of arthritis has been a question of prime medical interest for many years. The major theories currently include (1) An infectious process possibly incriminating one of the strains of the streptococci; (2) An allergic process secondary to an infectious process; (3) A traumatic etiology; (4) Nutritive and metabolic; (5) The currently investigative field of interfibrillary material changes, synovial membrane responses, hyaluronic acid, hyaluronidase and treatment with the steroids ATCH, Cortisone, and Artisone.^(3, 4, 5) There have been other theories advanced from time to time but the above comprise the major conceptions.

While the work with the steroids,⁽⁵⁾ is most remarkable at present, the fact still remains that they have failed to give us a cure for arthritis. They are rather acting as supportive therapy. This has been likened to the use of insulin in the diabetic which, as we well know, does not cure the diabetes but merely controls it.

While the mechanism of action of chloromycetin is not understood, it is an anti-biotic

and its action is presumed to be that of affecting a heretofore untouched organism. This can not be proven, if indeed chloromycetin proves to be any value at all, but it is certainly the most acceptable theory to explain its mechanism of action.

METHOD OF TREATMENT

A total of 24 patients complaining of joint pain, redness, and swelling, and for the most part showing elevated sedimentation rates, were treated with chloromycetin. The dosage schedule was as follows: 500 mgm. stat, 250 mgm. every 4 hours for 4 doses, then 250 mgm. four times daily with meals and at bed time. These patients received no other medication during the time they were taking chloromycetin. A total of 12 to 36 250 mgm. capsules of chloromycetin were administered in this manner. Twenty-one of the 24 patients reported immediate relief of pain within the 1st 24 hours of treatment. This ranged from an improvement to complete freedom from pain. Of the three patients failing to show improvement, all received only 12 capsules. Two reported no improvement and one stated that he seemed to note some flare up of his condition.

This work was done rather haphazardly during the course of a busy office practice and for that reason it is impossible to draw any final conclusions. Most of these cases have been followed in retrospect and the findings have been suggestive enough to warrant a complete clinical investigation. These cases were accumulated over a period of 2½ months and it has now been over 5 months since the 1st patient received any treatment. This time element gives added significance to our findings thus far.

Because of the expense of the drug and the inconclusive evidence at hand, we have refused to treat any additional patients or to allow any further administration to patients included in this group.

The 24 patients treated ranged in ages from 30 to 80 years with an average age of 58.7 years. The duration of symptoms ranged from six months to thirty-eight years; an average being about three years. All of these patients were felt to have some degree of activity of rheumatoid arthritis according to the standards of the New York Rheumatism Association as presented in the article by Steinbrocker, Traeger and Batterman. In the evaluation of the data, the patients were classified according to the degree of progression of the disease (stages 1 to 4, slight osteoporosis to bone destruction and ankylosis); by the amount of limitation of functional activity (classes 1 to 4, no limitation to total incapacity), and finally by the response to therapy (grades 1 to 4, remission to unimprovement.)⁶

Some typical cases are briefly outlined:

Case I Mr. E. A. O. — age 68 — intermittent pain both knees several years duration, severe, and persistent for last six months. No response to salicylates. X-ray diagnosis: mild degenerative changes bilaterally primarily noted in the right knee joint. This patient was given 12 capsules of chloromycetin on 11-18-49; five days later reported complete relief of pain except for forcible hyperextension of the right knee. No pain to date — five months duration.

Case II Miss B. T.: Diagnosis: Rheumatoid arthritis, severe, several years duration with much crippling and deformity. Sedimentation rate 8-9-49 at Mayo Clinic — 117 mgm. Patient has been poorly maintained on salicylates. Given 36 capsules of chloromycetin; improvement was superior to previous control on salicylates; increased mobility of joints. Patient took no salicylates during the time she was taking chloromycetin. There was some regression ten days after discontinuance of chloromycetin which was stopped because of the expense of the drug and my inability to suggest possible future results.

Case III Mrs. H. L. F. age approximately 50. Redness, swelling and pain both knees, 18 months duration. Sedimentation rate 12-28-49. 24 mgm. per hour. Given 24 capsules of chloromycetin with complete remission of pain and swelling. This patient was in my office March 24th and stated she had had a remission with pain in both knees, some swelling in the left, and had pain in back and

shoulders, these symptoms occurring approximately three days before 3-21-50. She has now been placed on salicylates and codein until further investigation can be undertaken. Complete relief 3 months duration.

Case IV Mr. W. F. age, 65: Diagnosis — Rheumatoid arthritis, 38 years duration. Received all available treatment in the past including gold with no relief. Given 24 capsules of chloromycetin 1-20-50. On 2-3-50 patient reported complete absence of pain for the first time in 38 years. Sedimentation rate was 56 mgm. Son-in-law confirms this is the first time in 15 years that he has seen the patient without pain. He has had no recurrence to date. (1 May 50). This is by far the most dramatic response among any of the patients.

Case V Mr. J. L. age, 66. Diagnosis — Rheumatoid arthritis, 15 years duration, with severe exacerbation during the last two years and much crippling and deformity generalized. Sedimentation rate 8-18-49 — 82 mgm. Patient received 24 capsules of chloromycetin in November 1949 because of an upper respiratory infection. Following this he was able to walk without his cane and with less pain than he has had for years. He has not had complete relief of pain but stated about two week ago 4-15-50 that he has maintained from 50 to 75% generalized improvement and has more freedom of movement in his joints than he has had in years.

Case VI Mrs. G. S. age 65 (wife of Dr. George Stevens). Pain in shoulder and pain in back of one year duration, swelling and pain in both hands, most marked in right, with some loss of function. Sedimentation rate 2-1-50 — 44 mgm. Patient received 38 capsules of chloromycetin. Sedimentation rate 2-14-50 — 16 mgm. Pain in shoulders and back completely gone; swelling and pain in hands improved.

Case VII Mr. M. K. Diagnosis — Rheumatoid arthritis. Joint pain and swelling without deformity three years plus duration. Received 12 capsules of chloromycetin. Reported he was worse during the time he took the capsules and has shown no improvement since. It is possible that the increase in symptoms initially might have given a good response had the drug been continued.

DISCUSSION

Numbers 1 and 4 showed a complete re-

mission. Both reported relief of pain complete within 24 hours and have no recurrence to date.

Number 3 is listed as a grade 2 response showing a complete remission within 24 hours of all symptoms, a complete loss of redness and swelling of the knees. This was maintained for a period of 3 months before a remission occurred, yet she had received only 24 capsules of chloromycetin.

Cases 2 and 5 both showed improvement while taking the drug and have maintained some benefit but again this and the preceding cases are suggestive of inadequate therapy.

Case 7 with a grade four response may have more significance than appears on the surface inasmuch as he reported increased activity following the administration of 12 capsules. Perhaps a higher dosage for a longer period of time might have given an altogether different picture.

There has only been one case of this entire series that has had more extensive treatment with chloromycetin. Appended hereto is a letter from G. A. Stevens, M.D. reporting his experience with the use of the drug.

Dr. Edward Greenough
Sioux Falls, South Dakota

Dear Dr. Greenough:

This is to report to you on the progress of my wife who suffers from rheumatoid arthritis, involving the ring and middle finger of both hands and the distal and middle phalangeal joints and with an added factor of a painful right shoulder that prevented her from sleeping at night.

Previous to the beginning of treatment, the joints of the fingers were spindle-shaped, red, and exquisitely tender, and had practically no power remaining.

The first course of treatment consisted of two capsules of chloromycetin, 250 mgm. each, the first dose followed by one capsule every four hours for three days. There was a definite relief of pain in the fingers and a complete abolishment of pain in the shoulder. After a rest of one week, she was given another course of treatment similar to the above, with still further improvement, but not complete relief of the finger pain. Again a rest of one week and the dose of chloromycetin was doubled, as was the length of administration; in other words, one-half gram

(500 mgm.) four times daily and for six days. Upon the completion of treatment, her fingers were without pain and she had practically normal power. The redness had disappeared, and the swelling had decreased noticeably. She has had no treatment for about six weeks and still maintains her improvement.

Thank you for your suggestions.

Yours faithfully,

Geo. A. Stevens, M.D.

My reason for stopping further treatment is that in a number of cases we have had good response initially and after a period of several days to several weeks, some recurrences. This may well be lack of adequate therapy. Likewise there is the possibility that some of these patients might become chloromycetin fast, as we have previously seen patients become penicillin fast for some invading organism, and prevent them from obtaining further relief of their condition if this drug proves of value. It is certainly conceivable that a patient who has been suffering from arthritis for many years might require doses of 250 or 500 mgm. as often as every four hours for perhaps several weeks to give a permanent response. The doses we have used have been very meager and will be a "drop in the bucket" in chemotherapy as we have come to know it since the advent of inexpensive penicillin.

We propose to carry on a future investigation starting patients with an initial dose of 500 mgm. four times daily for three days. In light of our past experience (ie, that they have shown improvement within 24 hours). This dosage will be maintained for three days. If there is no improvement at that time, therapy will be discontinued and the treatment recorded as grade 4 response. If improvement is noted, we propose to continue therapy indefinitely until some conclusive deduction can be drawn. In the future we hope to have careful roentgenological and laboratory studies preliminary to, and during the course of treatment.

It has been shown in the treatment of patients with the steroids⁴ that marked changes in the joints and synovial membranes can be obtained with these drugs. It is questionable whether chloromycetin, if it is acting against an infectious organism, could be expected to produce these same changes. However in a combination of these two types of therapy,

one in relieving what we previously supposed to be irreparable damage, and the other in combating the possible cause, we may have a whole new avenue of treatment opened to us in the field of arthritis. We hope to be able to report an intensive study at some time in the future.

CONCLUSIONS

- (1) 21 patients receiving small doses of chloromycetin for short periods of time, showed relief of pain of from 30 to 100%. This was maintained from ten days to as long as 5½ months (to date.)
- (2) Several of these patients showed reduction in sedimentation rates.
- (3) An observable reduction was noted in some cases of joint redness, swelling and an increase in joint mobility.
- (4) Two patients showed no improvement, one patient reported that he was worse under the treatment.

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MISCELLANY

Huron District Medical Society and its Auxiliary met at the Huron Country Club at a dinner to discuss final plans for the Annual Meeting.

H. P. Adams, M.D., president of the district, resided at the meeting and introduced the Executive Secretary, **John C. Foster**, of the State Association, for a short discussion with the combined group.

The groups then divided for separate meetings to work out details for their individual problems.

* * *

The Pierre District Medical Society met with members of the Auxiliary for one of the regular meetings on Friday May 12th.

Dr. R. F. Ferguson, Pathologist from the University of South Dakota, presented a scientific paper to the doctors after the Auxiliary members left the group to have their own meeting.

Guests at the meeting were: State President, **Dr. Wm. Saxton** and Executive Secretary, **John C. Foster**.

* * *

Drs. Donald Slaughter and **G. J. Van Heuvelen** represented the State of South Dakota recently at government schools on Atomic Medicine. Dr. Slaughter attended the one week course at Western Reserve University in Cleveland and Dr. Van Heuvelen attended a similar course at Salt Lake City.

Both doctors will figure in arrangements to disseminate the information to the medical profession of the state.

PHARMACEUTICAL NEWS ITEMS

Pharmacists Robert and Gene Den Beste have moved their drug store from Corsica to Mitchell, South Dakota, where they occupy the corner location recently vacated by the Larrison Pharmacy. The store building has been completely redecorated and the new lighting fixtures will make this store the brightest spot on Mitchell's main street. Additional space has been added at the rear of the store for the Prescription Department. There will be four Registered Pharmacists employed in the store giving adequate pharmacy service at all times.

Pharmacist William E. Bissell of Plankinton is recovering from a surgical operation done at the Methodist Hospital in Mitchell in February. Mrs. Bissell reports that recovery has been slow because of heart condition and complications.

Pharmacist D. C. Hobart and wife of the Hobart Pharmacy, Rapid City spent the winter in Florida. They plan to be home in time to help their son Leon J. Hobart with the tourist business.

Kermit Henry Lange who sold his pharmacy in Sioux Falls is now working for the Nevada Drug Company at Boulder City, Nevada.

H. R. Kruse resigned his position as pharmacist manager of the Haggard Drug in Sioux Falls and is leaving to go to the west coast according to information sent in by Inspector McCurdy.

Roy A. Quarve, a former drug store owner at Britton, has applied for reciprocal registration in Colorado where we understand he has purchased a drug store.

*Lifted from the Journal of:***North Carolina**

Another weapon against cancer in North Carolina was put into action at Durham, on March 7. This new piece of equipment is known as a Gastric Cancer Detection Mobile. It will provide examinations for between forty and fifty patients daily. The outstanding feature of this rapid survey equipment is the 70 mm. Schmidt-Helm high speed camera, one of only five of its kind in the country at the present time.

Kentucky

Seven major objectives for the 1950 campaign of the Kentucky State Medical Association were presented by Dr. Barr and were agreed upon by the group.

1. To present a united front. It was thought that an effort should be made to enlist the active support of every physician in the fight for the preservation of the profession.
2. To organize and use speakers bureaus. The value of educational talks before any and all groups was recognized.
3. To obtain resolutions against compulsory health insurance. It was emphasized that this continues to be the most effective method of keeping our legislators informed of the will of the people. When resolutions are obtained, they should be sent to the Secretary's office for duplication and forwarding to proper persons.
4. To distribute pamphlets and literature. Material is available in unlimited quantities. A generous supply is being forwarded each county society secretary.
5. To correct certain conditions within the profession which result in poor public relations. It was reported to the committee that Clark County physicians have arranged around-the-clock coverage for emergency calls. This action was highly commended and is an example of a forward step in improving the profession's relations with the public. It was also suggested that doctors assume more responsibility in civic affairs in their community.
6. To encourage each county society to hold at least one meeting arranged by its Public Relations Committee. The purpose of the meeting would be to encourage better

public relations and to enlist the services of each member in the campaign.

7. To utilize the services of the Woman's Auxiliary.

Kansas

The private physician is the keystone of any preventive medical program. If the physician develops an awareness of "point of view" of prevention, and strives to the best of his ability to prevent ill health among the families who have chosen him as their physician, then he can truly be called a master of the art of medicine and a respected physician by everyone in the community.

Michigan

The discovery in infant diarrhea outbreaks in southern England of unusual coli O-111 organisms, the type isolated in Michigan's recent outbreaks, brought to the Michigan Department of Health, Dr. Joan Taylor, infant diarrhea expert of England's National Salmonella Center. Dr. Taylor, one of the discoverers of the organism in the English outbreaks, came here to confer with Dr. William Ferguson, Coordinating Bacteriologist of the Department who isolated the organism in Michigan. Dr. Taylor also studied the Salmonella laboratories of the Department.

Minnesota

The annual meeting of the Minnesota State Medical Association will be held in Duluth, June 12, 13, 14, 1950.

A symposium on "Advances and Investigation in Surgery of the Heart" and one on "New Advances in Treatment of Joint Disease" centering around cortisone, ACTH and gold salts will take place. Wednesday will be largely devoted to considerations of atomic energy, the afternoon being devoted to a conference on "Atomic Energy in War and Peace" open to the public.

The Northwest Pediatric Society is sponsoring Dr. Armand J. Quick, of the Marquette University School of Medicine, who will speak on "The Common Hemorrhagic Diseases of Childhood." The Arthur H. Sanford lectureship in pathology will be given by Dr. Ancel Keys, whose subject will be "The Diet and Cardiovascular Disease." Presenting the Russell D. Carman memorial lecture will be Dr. Eugene Pendergrass, Professor of Radiology at the University of Pennsylvania.

The Value of the Recent Advances in Cardiology*

Graham Asher, M.D., Kansas City, Mo.

In discussing advances in Cardiology it is not the intent to pass personal final judgment on modes of therapy which are still under trial and under debate by active partisans, but rather to give a summary of preponderating results and to attempt to apply good physiological yardsticks to the possible value of some of the debatable therapy.

It has been said that the best way to be a complete bore is to tell everything. By that criterion, Stalin and General Eisenhower politically, and I cannot be said to be bores, of course in various degrees and for various reasons. In this area from which came the redoubtable Ajax Carlson we may expect to meet the independent mind, which, like Dr. Carlson, will not accept medical dictum and dogma without it meeting the searching inquiry of true chemistry and pathology and physiology. For that reason the yardstick of these basic sciences, particularly physiology has been constantly applied and is now applied in this discussion, leading to greater clarity and to more enduring conclusions.

In medical therapy it has been said that there is a "folie-a-trois" or an insanity of three fools made up of the hypomaniac fool who develops, the pompous fool who struts and promulgates, and the stupid fool who follows ill-considered forms of therapy. We turn from the explanation of the follies of the past and present to the valuable advances in recent time, selecting them from procedures now actively used or initiated within the past ten years, and presenting them in the order of their apparent value and success.

The greatest triumph is that of the antibiotic therapy of the blood stream and valvular infection which has been an increasing success in both acute and subacute bacterial endocarditis and endarteritis. The recent reports of Loewe and Keefer and others range from 63 to 86 percent survivals, including the large series with congenital heart lesions and previous rheumatic valvulitis, where the

handicap to all therapy seemed insurmountable. The lowest percentage of recovery has come in streptococcus fecalis and the overwhelming terminal infections such as pyocaneous and melitensis infection, but, even here, the chances for success are increasing as the dosage of antibiotics is increased and the combined therapy of Penicillin and Streptomycin used. The greatest number of failures have proved to be attended with vascular accidents such as the rupture of mycotic aneurisms and valvular cusps, introducing mechanical rather than bacteriological complications. The great aid this therapy has given to heart and chest surgery, and particularly the bold attack on the congenital heart problem, is another reason for placing the use of antibiotics in a particular place as a modern therapeutic triumph. The occasionally met misfortunate sensitivity to the antibiotics can be met in great part by the rotation of the antibiotics and the use of active sulfones at intervals of greatest sensitivity. A note of advance can be made here that the interrupted treatment two or three times daily promises to be worthy of adoption, whether used with oils or another delaying agent of absorption or not. It is apparently better to peak the defense high several times during the day rather than to maintain a more moderate level continuously,—but here we enter the realm of dispute.

The second choice of successful therapy is the surgery of congenital heart for whom many men must be given credit. Most of you are familiar with the Blaylock operation of John Hopkins, the Robert Gross aortic resections of Boston, and the clever aortic-pulmonary shunt of Willis Potts of Chicago. The success of these procedures depend mainly on selection of cases, and the great value of pressure, volume and oxygenation studies of cardiac chamber catheterization and angiocardiology may be seen both here and in present contributions to fundamental cardiac physiology. Medical students are being told exactly what the pressure and oxygenation

* Presented at the 67th Annual Meeting SDSMA
Sioux Falls, June 1, 1948.

of the normal and abnormal heart chambers are, and it is now a part of their education to see the chambers and walls of the heart outlined in motion by fluoroangiocardiology both at rest and at work and under the stimulant and depressant drugs. The lowly young cardiac physiologist now has every possibility in his hands to dispel misconceptions of the past in therapy and from these observations in health and disease it is possible to evolve therapy objectively and to select faulty pathological physiology and attack it directly with clear knowledge of the mode of operation. For example, if the stroke volume is at fault it may be increased; if the total blood volume is excessive it may be decreased; if oxygenation is insufficient the oxygen needs may be met; and time and money will not be fritted away in disproving the claims of misled clinicians and detail men.

The murmurs produced by surgically produced shunts are quite striking. It is not yet known what percentage of shunts will endure a satisfactory number of years and it is presumed that the increased danger of bacterial infection will be fully met by antibiotics, recalling that eternal vigilance is the price of freedom from this danger. It is quite interesting to attend the centers of cardiac surgery, where in one room a patent ductus is being tied to close the shunt and obviate the murmur in danger of infection, while in the next room the shunt is being made surgically from the aorta to the pulmonary artery to secure sufficient pulmonary oxygenation and reduce the complicating compensatory polycythemia. It is interesting to note the polycythemia disappearing following successful shunt operations.

The resection of coarctation of the aorta is a complete cure without reservation in skillful hands. It is interesting to note the almost complete success in the control of the hypertensive by this means, the only failures being those where an aplasia of the aorta is met and this may be anticipated by angiocardiology of the aorta.

Let us be resolved that we see no cases of hypertension without taking the blood pressure in both arms and at least one leg, and, if the symptoms are intermittent, on more than one occasion in order that the evasive pheochromocytoma be recognized. To illustrate the value of this rule, I was asked as a visit-

ing consultant during the World War II to review five cases of hypertension consistently above 200 in soldiers under thirty years of age. Three of them had coarctation of the aorta with minimal scalloping of the ribs but with very low blood pressure in the legs, and they had never had previous blood pressure observations of the legs. The other two cases had pressures slightly lower in the popliteal than in the brachial arteries and it was thought probable that they had aortic aplasia with added vasoconstriction since they were constant heavy smokers. I recounted this defect of physical diagnosis to a group of medical teachers and received this valuable contribution from the astute older professor. "Taking blood pressure of the legs might get to be work, but I'll bet if they were good looking Wacs with nicely tapered legs which would be hard to get blood pressure on they would have their blood pressure taken every day." So the human factor enters into our observations.

The use of anticoagulant drugs, commonly Heparin and Dicumerol, represents a distinctly valuable recent advance, since the complications of thrombosis have always been a threat in congestive failure, irregularities, prolonged bedrest, and in coronary artery and peripheral artery thrombosis. In the author's experience there has been only a six percent failure of the anticoagulants to do what must be reasonably expected of them. The recent surveys of Wright and Nichol and others have averaged a reduction of vascular accidents and major cardiac problems from 27% to about 9%. Intravascular and intracardiac clotting and mural thrombosis is certainly preventable and it is inescapable that we will continue to benefit from the prevention of thrombosis during periods of accident and low blood flow in a variety of conditions. The heart in shock fibrillation will form thrombi, the infarcted endocardium will form thrombi and propagation of coronary and other interarterial clots will occur without this aid, so the procedure is here to stay. The major criticisms come from the facts that Heparin acts rapidly, is evanescent and is expensive, but may be controlled by a simple bleeding time test. Dicumerol is very uncertain, depending upon blood, chemical and variable liver chemical factors; is slow to act and requires complicated Prothrombin tests,

but is relatively inexpensive. Zollinger of the University of Ohio has perfected a Caronamide-Heparin in Oil technic which over a ten day period secures a more uniform anticoagulating effect, easily checked by the simple bleeding time and costing no more, namely \$50.00 average for the administration.

Since as recently expressed by Dr. Nathan Davis of Chicago, arterial disease is the real first cause of death, supplanting all other forms of cardiovascular disease, it is proving true that the prevention of peripheral thrombosis or small vessels becomes of paramount importance. It has not yet been figured out how to care for the patient in the extreme congestive failure, collapse and myocardial accident without the full use of bedrest during the period of extreme weakness and danger. It is recognized that the principal danger of the low period is phlebothrombosis and this may be largely obviated by the use of anticoagulants. One may wish ever so earnestly to keep the patient ambulant but in Cardiology it is too often impossible. We must recognize the value of the advance of early ambulation. It is psychologically good for the patient to be out of bed since many of the patients follow the suggestion in ancient hymns, "Teach me to live that I may dread the grave as little as my bed." The lessening of respiratory congestion and doxygenation, the avoidance of bed sores and pressure point distress, deformities and stiffness, the defects of low bone marrow exchange in the elderly, the lessened appetite in digestive force, and constipation and lessened urinary exchange, all are factors in creating the evil of excessive bed care. This may not rightfully be called a recent advance since McKenzie encouraged the activity of his patient and Lewis created the postural cardiac bed; the European school taught the value of the baths and Spa treatment with massage and increasing ambulation. To quote a recent satire on the danger of going to bed, "Look at a patient lying long in bed. What a pathetic picture he makes. The blood clotting in his veins; the lime draining from his bones; the scybala stacking up in his colon; the flesh rotting from his seat; the urine leaking from his distended bladder; and the spirit evaporating from his soul."

Most useful for the hard pressed clinician is the advanced knowledge of the relationship of sodium retention, increased blood volume

to the picture of congestive heart failure. Schemm of Great Falls made a real advance in calling the attention to the value of water as a diuretic and in the caution against the avoidance of hyperconcentration or dehydration of the blood while the peripheral tissue remains engorged. He illustrates that one cannot continue to use powerful diuretics such as mercurial in the blood stream which is already concentrated. You must increase the exchange between the tissues and blood. It is not sufficiently understood that his contribution is directly and completely linked with the knowledge that sodium restriction and acidification are both necessary for dehydration of the tissues beyond the blood stream. The work of Reaser and Burch with tracer sodium demonstrated the failure to eliminate sodium. The patient in congestive failure was able to eliminate as little as one percent the amount of sodium which a normal control individual will eliminate. In congestive failure the sodium excretion after mercurial diuresis was demonstrated to increase as much as seventy-five times or near normal. Since sodium clearance is so impaired in the congestive heart failure, sodium restriction has become a necessary part of therapy. This was demonstrated many years ago in renal physiology but only recently advanced clinically.

The retention of fluid may not be in the tissues alone but may be in the blood increase, the venous pressure and, or, the arterial pressure leading to hypervolemia and constituting a factor in some cases of chronic hypertension, and always in the hypertension which attends congestive failure.

Reichsman and Grant observed that a rise in pressure in the peripheral veins often precedes a gain in weight when digitalis is halted in people with cardiac disease. Warren and Stead approved the concordant rise in tissue pressure, plasma volume and venous pressure and increased sodium administration or retention. The study of the blood proteins as well as the study of the total blood volume have become valuable laboratory tests since the increased total blood volume illustrates a primary complication and the blood protein represents the ability of the body to follow the dilution. The management of hypertension and congestive failure therefore calls for measures which successfully reduces the

total blood volume and cellular and extra cellular fluids.

The difficulty of securing adequate sodium restriction has lead to the adoption of low salt diets which are very strict as attested by Wheeler, Bridges and White. Gorham has demonstrated that restricting sodium is more effective than forcing fluids in securing diuresis and combatting edema.

George Thorn of Boston has recommended a potassium salt substitute and medication which apparently aids up to the point of the danger of increasing the intoxication of impending uremia by potassium retention.

The effectiveness of digitalis in a congestive failure problem depends entirely upon its ability to secure a more optimum rhythm and rate or to raise the stroke output in the "low output" types of heart failure.

This brings us to an important advance, which is the rapid and accurate digitalization by crystalline lantosides and crystalline digoxen and digitoxin extracts of digitalis. Those who favor a moderate or intermediate action between that of the whole leaf and digitoxin have favored the lantosides, particularly digoxen from digitalis lanata. Crystalline digitoxin first made as Digitaline Nativelle is now available both by hypodermic and mouth administration. It has been established that a 150 pound man requires 1.2 milligrams of Digitorin to maintain full digitalis effects and that approximately ten times that amount is necessary over a two day period to reach digitalization. The tendency to give large doses has lead to distressing digitalis intoxication which may well bring the method and profession into disrepute if not tempered with judgement.

The vasodilating drugs employed in some relationship with benefit are too numerous to discuss but it may be stated that Papaverine has aided coronary and bronchial artery dilatation and lessened the necessary dose of opium derivatives to secure comfort and has lessened the danger to the patient. Intravenous large doses of Papaverine in pulmonary embolism has been accepted as of value. Alcohol as an arterial vasodilator when well controlled has grown in favor. Its intravenous use in 5% solution with dextrose has been particularly of value to produce benefit and relaxation in coronary and peripheral artery occlusion in the alcoholic pa-

tient. Etamon or TEA or Tetra Ethyl Ammonium is proving its value in our hands and from many reports in effecting peripheral vascular dilatation as a test of peripheral vessel patency; as a sympathetic nervous system depressant in cases of hypertension considered for sympathectomy, a favorable blood pressure fall being considered indicative of a good result from the sympathectomy; and to lessen the night distress and night secretion of peptic ulcer, equaling the effect of vagotomy transiently.

The Aminophylline derivatives most surely are effective in low cardiac output cases but have become secondary rate vasodilators.

Oxygen therapy is here to stay with improved methods of administration. A lessened cardiac rate and distress is almost invariable, and the anoxia which may not be recognized is always relieved, and urinary output and liver function increased with loss of untoward side effects.

Adjunct protein feedings and adjunct mineral feedings are the field of the author's chief interest. The combination of extra aminoacids always with supplementary vitamin feedings has given a small modicum of success and in acute myocardial deficiencies and over a long period of time appears to be gaining favor for the long term administration to the chronically deficient patient. This therapy dates its inception from the demonstration of lowered glucose and aminoacids content of damaged muscles made by George Hermann and predicted on his observations a favorable balance of nutrition has been obtained. The lessened protein intake and lessened digitalis and enzymatic function of the digestive tract and liver in the cardiac patient make the success of the aminoacids possible.

Vitamin and mineral supplements, particularly calcium and potassium and phosphorus, are proving of value in selected cases. The selection of the cases being largely determined on the over use of coffee as a purine diuretic combined with the history of low mineral food intake and as no milk drinking; the presence of a defect of digestion and the long continuance of congestive failure of the liver with abeyance of its enzymatic function. Cardiac muscle is prone to poor contraction form and poor diastolic relaxation and early fatigue and failure of full systole in the absence of these foods.

Management of Acute Head Injuries

By a Special Committee of The Harvey Cushing Neurosurgical Society

Head injuries may be classified as (A) open and (B) closed. Open injuries incur the risks of (1) hemorrhage and (2) wound infection. Closed injuries involve the risks associated with (1) immediate destruction of brain tissue (contusion, laceration, etc.) and (2) progressive damage secondary to (a) cerebral compression due to intracranial hemorrhage or edema, and (b) anoxia resulting from an inadequate airway.

For clarity, the treatment of open and closed wounds will be considered separately in this bulletin, but it is to be emphasized that both often are seen in the same patient and require consideration jointly.

Treatment of Open Wounds

The proper treatment of **lacerations of the scalp** consists of thorough cleansing, debridement and snug closure. As a first-aid measure, a compression bandage should be applied to control bleeding. Externally protruding foreign bodies should not be manipulated. When the patient's general condition permits and adequate equipment is available, the following procedure should be undertaken:

- (1) Shave scalp widely about the wound.
- (2) Cleanse wound with soap and water and irrigate thoroughly with copious amounts of solution (saline or water).
- (3) Infiltrate margins of scalp wound with procaine.
- (4) Remove dirt and excise devitalized portion of scalp.
- (5) Explore skull for fracture.
- (6) If no fracture, close wound snugly in one or two layers with interrupted sutures of nonabsorbable material.
- (7) Give antitetanic serum or tetanus toxoid.

Simple lacerations may be closed in the Emergency Room by a single operator, but it is more satisfactory if the operator has an assistant to compress the margins of the wound to control bleeding.

Where the **laceration overlies a fracture**, surgical correction should be undertaken only in the Operating Room, for it may be neces-

sary to remove dirt, hair, or debris from the fracture line or to remove bone fragments. One should be prepared to deal with bleeding from the dura and brain.

If the **brain is lacerated** or **foreign bodies are retained** within the brain substance, all macerated brain tissue should be removed, the foreign bodies removed if possible, particularly if they are nonmetallic, all bleeding controlled and the dura and scalp closed snugly. Surgical treatment of these wounds requires experience in brain surgery and special equipment (suction, lighting, electrocoagulation, etc.). With the use of chemotherapeutic and antibiotic agents, it is permissible to defer operative closure of wounds for many hours pending improvement in the patient's general condition and analysis of his neurologic status.

Leakage of cerebrospinal fluid from the nose or ear constitutes a special problem. Any cerebrospinal fluid fistula invites the risk of meningitis. Now, with an adequate screen of antibiotic and chemotherapeutic agents, one is justified in waiting ten to twelve days pending spontaneous closure. If the leak persists longer than this, surgical closure of the fistula should be considered. Some feel that lowering of the spinal fluid pressure to 90 mm. of water by spinal drainage every twelve hours promotes spontaneous closure. Fortunately most fistulas do close spontaneously.

Closed Wounds

One of the most frequent causes of death after head injury is progressive cerebral damage due to anoxia. Many factors contribute to this:

- (1) The capacity of the contused brain to utilize oxygen is diminished.
- (2) The cerebral blood flow is reduced, even though blood pressure may be elevated.
- (3) The oxygen concentration of the blood is diminished as the result of a disturbed respiratory center and obstruction of the respiratory tract (tongue, mucus, pneumonitis).

The treatment in such cases is the maintenance of an adequate airway and the administration of oxygen. Patients frequently improve remarkably after clearing the airway and administering oxygen. The most satisfactory way of giving oxygen is by nasal catheter. Oxygen tents and masks interfere with attempts to keep the airway patent. Constant nursing attention, with a suction apparatus for the removal of mucus, is necessary. This may be supplemented by postural drainage (head down on face). Tracheotomy is indicated in certain cases.

The **differential diagnosis** between surgical and nonsurgical lesions is of primary importance in the management of acute head injuries and usually depends upon the patient's course. Hence, a carefully taken history, particularly as relates to the onset and duration of unconsciousness, and frequent and repeated neurological examinations are necessary.

Intracranial clot, such as extradural, subdural or intracerebral hematoma, usually is incompatible with life and requires surgical removal. Most patients with these lesions show progressive stupor, convulsions, focal paralyses and disturbance of the vital signs, such as alteration in pulse, respirations, etc. If the patient has been conscious and then loses consciousness, an expanding intracranial lesion is probably present. The lucid interval may be prolonged (days or weeks) with subdural hematoma. If the patient has remained continuously unconscious from the moment of impact, the coma may be due in part to contusion of the brain and in part to an expanding lesion. In such instances, it may be impossible to make a differential diagnosis clinically, and cranial exploration then is necessary if the patient's condition is growing worse.

The **surgical management** of these lesions is not within the scope of this paper.

(1) **X-rays.** X-rays of the skull rarely influence the course of treatment, yet the procedure of taking films involves considerable manipulation and wastes time, both of which are detrimental to the ill patient. Hence, it is advisable that x-ray examination of the skull be deferred until such time as the patient is co-operative and his condition stabilized. Attention should always be given to the possi-

bility of injury elsewhere, particularly to the cervical spine.

(2) **Position of Patient.** The position of election is with the head elevated, since this reduces venous congestion. The advantages of this position, however, are far outweighed by the disadvantages which might accrue from an obstructed airway, and if the patient's airway cannot be kept completely open with the head elevated, this position should be changed to one which best promotes an adequate airway.

(3) **Shock.** Surgical shock (peripheral vascular collapse) is rare in head injuries per se, but, when present, the usual measures (Trendelenburg position, intravenous fluids, heat, etc.) should be employed. Shock usually indicates associated injuries and demands primary consideration.

(4) **Fluid Balance.** In an effort to reduce or limit cerebral swelling after head trauma, certain writers have advocated rigid dehydration by withholding fluids, administration of hypertonic solutions intravenously, the use of magnesium sulphate enemas, etc. Rigid dehydration does harm rather than good to an ill patient, as the other vital body functions are interfered with. Fifteen hundred to 2,000 cc. daily are necessary to keep the patient in fluid balance.

It is necessary in this connection to keep close watch upon the protein metabolism. Coma, stupor and prolonged confusion often result from protein depletion and can be prevented or corrected by the administration of protein hydrolysates, plasma or whole blood. If coma is prolonged, gastric feedings by nasal catheter are indicated, using a high protein diet.

(5) **Spinal Puncture.** Considerable controversy prevails concerning the indications for and the merit of spinal puncture in the diagnosis and treatment of head injuries. Some advocate daily spinal punctures as routine in the treatment of head injuries, but this is not generally accepted. The authors of this bulletin consider the indiscriminate use of spinal punctures dangerous. The following are considered proper indications for spinal puncture.

(A) Diagnostic—

(a) To determine pressure where intracranial clot is suspected.

- (b) To determine the presence and/or degree of bleeding.
- (B) Therapeutic—
 - (a) To lessen intracranial pressure by withdrawing fluid as a temporary expedient pending measures that provide more lasting control of increased intracranial tension, such as surgical evacuation of clot.
 - (b) Evacuation of bloody fluid when signs of meningismus appear, usually four to eight days. Evacuation of fluid at this time usually relieves headache and speeds recovery.

Technique. When indicated, a spinal puncture should be done with the patient in the lateral recumbent position, using a standard spinal puncture needle.

The operator should make the following determinations: color of the fluid, initial pressure, final pressure and the amount withdrawn.

Jugular compression tests should not be carried out unless one suspects injury to the spinal column. These tests give no information of value with reference to the brain, and the sudden rise in spinal fluid pressure which follows jugular compression may be harmful after head injury.

Spinal puncture should not be attempted if the patient is unco-operative, for the information obtained is unreliable, and struggling against resistance may be harmful.

(6) **Control of Restlessness.** Patients who are restless and confused constitute a difficult nursing problem, and sedative medication may be necessary. Paraldehyde administered rectally or barbiturates — sodium amytal, sodium luminal — intramuscularly or intravenously are satisfactory. The latter are particularly indicated for the control of convulsions. Morphine and codeine are contraindicated because of depression of respirations, edema of the larynx, and alteration of pupils (diagnostic).

(7) **Convalescence.** Early ambulation is recommended after head injury. The patient should receive physical therapy in the form of active and passive exercises early and should be gotten out of bed into a chair as soon as he is able and willing to co-operate. Prolonged bedrest is conducive to traumatic neurosis.

Lacerations of the brain, such as are associated with depressed fractures and penetrating wounds, are frequently followed by a convulsive disorder. These patients should be given anticonvulsive medication for a period of several months after injury. The drug of choice is Dilantin Sodium gr. 1½ three times daily.

Many patients complain of residual headache, particularly in the posterior part of the head, and of dizziness. These symptoms generally are classified as posttraumatic neuroses. Recent observations indicate that they may result from trauma to the cervical roots and at times are relieved by cervical traction.

NOTE: The foregoing is one of several articles distributed by the Committee on Trauma, American College of Surgeons, through its Regional Committees.

CUFF NOTES

Thirteen Points Necessary in Records for Court Cases Cont'd

9. The findings of a radiologist are entered in the record after the physician has reviewed the films and confirmed the report. The physician is then able to testify as to his own interpretation of the films.

10. The originals of all laboratory reports are kept on file. Date ordered and date reported and an abstract of the findings.

11. The financial data are either copied on the clinical record or, if separately kept, removed and attached to the record when it is brought to court. This included bills sent and fees received, with dates, and a note of who actually paid the fees.

12. A carbon copy is retained of every record, report, and letter sent out. **There are no exceptions to this rule.**

13. At least once on the record, and more often if the patient is seen for a long period, a note is entered as to extent of disability. The disability should be judged by six indices:

to be continued next month

Missing an Ectopic Pregnancy

Ectopic pregnancy should be of interest to every physician or surgeon, personally, if not professionally, as it may kill his wife, his daughter or some other woman of his family.

1. Constipation: because of pain on defecation.

(Continued on Page 158)

EDITORIAL PAGE

PHYSICIANS AND POLITICS

This being an election year, with the primaries coming up next month, it might be well for South Dakota physicians to do a little serious reflecting on the political situation.

Years ago many people believed that the members of the medical profession should not become actively interested in political campaigns but now-days there are so many Bills introduced and laws passed which affect the public health and the medical profession that it is generally recognized that the more interest doctors take in politics the better it is for the public and the profession. Doctors should also be good citizens and it is only good citizenship to be interested in the campaigns of candidates for public office, evaluating the qualifications of the various candidates and getting information about the candidates and their views on medical and health issues. When the candidates have held office previously one can examine their past records for such information, otherwise personal interviews are indicated.

The best time to establish friendly relations with a person holding public office is before he is elected since candidates are then in a much more receptive mood than they are after election.

While Medical Societies may not use Medical Society funds, letter heads and facilities, for promoting the cause of any candidate for federal office, physicians, as individual citizens can support such candidates, if they wish. By all means a physician should be sure to vote and to see that members of his family and employees also exercise their privilege of casting their ballots in all elections. Physicians can not win their fight against political medicine by staying away from the polls on election day.

At the February Conference of the American Medical Association Educational program, Chas. S. Nelson, Executive Secretary of the Ohio State Medical Association, gave us some startling facts regarding the 1948

election. Analysis of the records of one County in Ohio showed that 18% of the physicians in the County did not vote — 13% were not even registered; 22% of the wives of physicians did not vote — 16% were not registered; 18% of the druggists did not vote — 15% were not registered; 32% of Bank employees, including executives, did not vote — 26% were not registered; 33% of the ministers did not vote — 26% were not registered; 21% of the members of the Chamber of Commerce did not vote — 15% were not registered.

Elections are still won by votes and the politicians understand that fact very clearly. Candidates are naturally more responsive to the views of groups which get out and vote so make it a point to find out how various candidates in your community stand on matters which vitally affect your profession and then be a good American citizen and VOTE on election day.

R. G. Mayer, M.D.
Aberdeen, S. D.

TEACHERS AND COMPULSORY HEALTH INSURANCE

During recent months more polls, regional and national, have been conducted by political research outfits, etc., on the attitude of various groups towards government compulsory health insurance. Several of these polls report that a higher percentage of school teachers favor such compulsory insurance plans than one would expect. This rather astounding fact means that physicians have evidently failed in some respects in their public relations because teachers with their educational background, ought to understand the many fallacies and shortcomings of government compulsory health insurance. Perhaps it behooves each of us to be a little more zealous in discussing the subject of socialized medicine with our teacher patients and friends if we have the opportunity presented to us.

The National Educational campaign of the A.M.A. can furnish physicians with plenty of pamphlets and information which should set the school teachers right on this important subject of socialized medicine. Let's see that they get this material because teachers not only have influence in their own group but in the P.T.A. and they also have a profound effect on the thinking of their pupils.

R. G. Mayer, M.D.
Aberdeen, S. D.

SURVEY OF PHYSICIANS' INCOMES

The Bureau of Medical Economic Research of the American Medical Association has been authorized by the Board of Trustees to co-operate with the Office of Business Economics of the United States Department of Commerce in conducting a survey of physicians' incomes. The survey will start this spring, and an analysis of the results will be published by the Department of Commerce next fall in its publication "Survey of Current Business."

Physicians are assured that the survey has no relation to the Bureau of Internal Revenue and that this information could not have been obtained by the Department of Commerce from the Bureau.

Two questionnaire forms will be sent out: a short form requesting income data for 1949 only, and a long form covering the years 1945 through 1949. All are returned unsigned. The survey will cover an impartial selection of 125,000 of the 200,000 physicians of the country, a short form going to every other name in the file, and a long form to every fourth physician of the remaining 100,000.

It is believed that the national averages in some surveys have been too high because many physicians without bookkeeping secretaries will ignore such questionnaires. Consequently, the Bureau of Medical Economic Research urges all doctors, especially those with small practices, to fill out and return the questionnaires. Only by an accurate analysis of this nature can a reliable estimate be made of how much the American people are paying their physicians.

GULLIBLES' TRAVELS

March 29 — Discovered a notice to attend a meeting of the Nurse Survey executive and advisory committees in Pierre at 9:00 A. M. the next morning. Drove to Pierre and stayed at the new Terrace Hotel which is the best in accommodations that Pierre has seen in a long time.

March 30 — Attended the two meetings that started at nine in the morning and lasted until noon. Drove to Harrold where I spent a pleasant hour in conversation with **Dr. H. B. Martin**.

March 31 — Drove to Vermillion with my Mrs. to attend the Annual Medical School Dinner Dance which was a most pleasing affair. **Dr. Don Slaughter** did a fine job as toastmaster.

April 4 — Scheduled to meet with the Organized Reserve Corps in Sioux Falls to discuss plans for the May 20, "Armed Forces Day" but couldn't help much because of our Annual Meeting. **Miss Anderson** from the office sat in on the discussions in my place.

On April 12, I drove to a schoolhouse near Colman with Farm Bureau representative **Vernon Olson** to tell a F.B. unit about the South Dakota Injury-Illness Expense Plan.

The next day, the executive committee of the nurse's survey met in Sioux Falls to discuss probable findings. Nurse **Olga Ulberg** of Sioux Valley Hospital was in charge of the meeting that headlined **Miss A. Frances Olson** of the U.S.P.H.S. as survey consultant. The same evening I addressed twenty-five young ladies of the Junior History Club on the facts of compulsory health insurance.

April 14 — The Widmann Hotel — pffft!!

April 17 — Spent Monday and part of Tuesday in Huron making arrangements to transfer the Annual Meeting from Mitchell to Huron. **Dr. Saxton** called a meeting of the district society and the plans were all completed.

On Thursday, April 20, drove to Huron to a meeting of the Auxiliary to discuss their convention plans. **Mrs. Wm. Sercl**, State Auxiliary president, and my secretary, **Miss Sundstrom**, made the trip with me. (Have I told you about those steaks at the Prairie Moon yet?)

This is



MAY
1950
Vol. 3 No. 5

YOUR MEDICAL ASSOCIATION

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

SOUTH DAKOTA DOCTOR WINS CLUB AWARD

Dr. Mary Price, Armour physician and member of the South Dakota State Medical Association, was awarded the Soroptimists Clubs North Central Regional post-graduate fellowship.

Dr. Price won the award, which will provide \$1,500.00 for study, in competition with nominees from the four-state area of Minnesota, South Dakota, Iowa and Nebraska.

The award was announced at a dinner meeting in Sioux City last month and is the first such award to be granted.

Dr. Price upon accepting the award, announced that she would take post-graduate work in obstetrics at Cook County Hospital in Chicago.

YANKTON DISTRICT MEETS

The Yankton District Medical Society held their Spring meeting, Wednesday, April 19th, 1950, in the Congregational Church, Vermillion, South Dakota.

The scientific program was headed with a presentation on "Carcinoma of the Lung and Bronchiectasis" by Donald F. Rayl, M.D., Sioux Falls, S. D. with the transac-

tion of society business following the program.

A combined dinner with the Ladies' Auxiliary was given at 6:30 P.M., preceeding an Auxiliary meeting.

Officers of the Yankton District are; M. Auld, M.D., President and F. J. Abts, M.D., Secretary-Treasurer.

JAMES H. STONE NAMED PROGRAM FIELD CON- SULTANT FOR AMERICAN HEART ASSOCIATION

The appointment of James H. Stone as a Program Field Consultant in the Public Health Division of the American Heart Association was announced by Dr. John W. Ferree, Public Health Director of the Association. Mr. Stone will assist in organizing local heart associations and developing community cardiac programs.

Mr. Stone previously served as Director of Public Health Education, City Health Department, Richmond, Va., and for the past year was Instructor in Public Health at the Medical College of Virginia in Richmond. For several years, Mr. Stone was Chief Sanitarian of the Sanitation and Community Health Organization of the Alaska Territorial Health Department.

A native of Williamsburg, Va., Mr. Stone obtained his Master of Public Health Degree at Yale University. He holds a B.S. Degree from the College of William and Mary, where he also served as an Instructor in Public Health.

NEWS ITEM

About thirty members were present at a dinner meeting of the Aberdeen District Medical Society, held in the ballroom of the Alonzo Ward Hotel, Tuesday evening, April 25th. The question of adopting a revised fee schedule for the District Medical Society was discussed and Dr. M. E. Sanders of Redfield, presented a paper on "Purpura Hemorrhagica."

MEDICAL ILLUSTRATORS' DIRECTORY AVAILABLE

The Directory issue of GRAPHICS, the official publication of the Association of Medical Illustrators, contains the name, address, training, professional experience and reference to major published work of each member. Other information to the profession is included.

The journal, to be issued on June first, will be avail-

able to those requiring medical illustration service, and will be sent, free of charge, upon request to the Editor, Miss Helen Lorraine, 5212 Sylvan Road, Richmond 25, Va.

**REVISED EDITION OF
MOTION PICTURE
REVIEWS NOW
AVAILABLE**

The Committee on Medical Motion Pictures of the American Medical Association has completed the second revised edition of the booklet entitled **REVIEWS OF MEDICAL MOTION PICTURES**. This booklet now contains 225 reviews of medical and health films reviewed in **THE JOURNAL A.M.A.** to January 1, 1950. Each film has been indexed according to subject matter. The purpose of these reviews is to provide a brief description and an evaluation of motion pictures which are available to the medical profession. Each film is reviewed by competent authorities and every effort has been made to publish frank unbiased comments. Copies are available at a cost of 25 cents each from: Order Department, American Medical Association, 535 North Dearborn Street, Chicago, 10, Illinois.

**A.M.A.
GOLF TOURNAMENT
MONDAY, JUNE 26**

C. E. Shannon, M.D., Chicago, President of the American Medical Golfing Association, announces that the 34th Tournament will be held on the two very attractive golf courses of the Olympic Golf Club, San

Francisco, on Monday, June 26, on the opening day of the 1950 A.M.A. Annual Session.

Edward Campion, M.D. of 1018 E. Street, San Rafael, California is Chairman of the California Committee on Arrangements. He is aided by John E. Bohm, Sr., M.D., San Francisco, Harry N. Hensler, M.D., San Anselmo, Thomas G. Lawler, M.D., San Francisco, Edward F. Stadtherr, M.D., San Francisco, Robert P. Thompson, M.D., San Francisco and Paul S. Wayne, M.D., San Francisco.

Members of the A.M.G.A. Executive Directors for 1950 include President Shannon; Jean A. Gruhler, M.D. of Atlantic City, President-elect; T. A. Kyner, M.D., Kansas City, Mo., First Vice President; D. H. Houston, M.D., Seattle, Permanent Chairman of Advisory Committee.

Fellows planning to participate should send, as soon as possible, their name, handicap, and section in medicine in which they will register to Secretary Bill Burns, 2020 Olds Tower, Lansing 8, Michigan. This will assist the local committee in making the necessary arrangements. The starting committee will assist players from the different states to arrange games with like handicaps, age, and specialty.

The detailed program of AMGA Tournament will appear in the Convention Number of the AMA Journal.

Applications for membership may be obtained by writing to Secretary Burns, 2020 Olds Tower, Lansing 8, Michigan.

**AMERICAN COLLEGE OF
CHEST PHYSICIANS
TO MEET**

The Sixteenth Annual Meeting of the American College of Chest Physicians will be held at the St. Francis Hotel, San Francisco, California, June 22 through 25, 1950. An interesting scientific program has been arranged for the meeting.

The Board of Examiners of the American College of Chest Physicians announces that the next oral and written examinations for Fellowship will be held in San Francisco, June 22, 1950. Candidates for Fellowship in the College who would like to take the examinations should contact the Executive Secretary, American College of Chest Physicians, 500 North Dearborn Street, Chicago 10, Illinois.

Dr. William L. Meyer, Sanator, is the Governor of the College for the State of South Dakota.

**NATIONAL CONFERENCE
ON CARDIOVASCULAR
DISEASES REPORTS**

"Despite serious gaps in our knowledge of prevention and treatment, the chances for heart disease patients to lead a useful life are improving steadily," according to a summary report of the National Conference on Cardiovascular Diseases, which has just been published in pamphlet form by the American Heart Association in cooperation with the National Heart Institute.

The following points of information were listed as most important in general public

education about heart disease:

"Cardiovascular diseases include many diseases of the heart and circulation. Some of these diseases are preventable—for example, heart conditions which follow acute communicable diseases. All cardiovascular diseases can be handled best if diagnosed early and treated properly. Most can be materially improved by proper treatment. Cardiovascular diseases do not necessarily prevent a person from earning a living in a suitable job and enjoying himself in appropriate recreations. Symptoms that seem to suggest cardiovascular disease do not necessarily mean a diseased heart. Only a physician can tell."

The National Conference on Cardiovascular Diseases was held in Washington last January 18-20 under the joint sponsorship of the American Heart Association and the National Heart Institute of the U. S. Public Health Service, Federal Security Agency. One hundred and 96 professional and lay leaders from 32 states attended the Conference to determine present knowledge about heart disease and how this knowledge can be applied to prevent and control it.

In describing the two main essentials for further progress in combating heart disease, the conferees declared:

"First, there must be broader knowledge of cardiovascular diseases. We do not know what causes high blood pressure and hardening of the arteries. The causes of congenital malformations are only beginning to be under-

stood. The origin of rheumatic fever is still a mystery. Obviously research must be pressed in these fields. Research will take time, but no time need be lost in acting on the second requisite for progress: fuller application of existing knowledge."

The Washington conferees recommended that all professions related to the prevention and treatment of heart disease make greater use of the facts that are known today.

The Section on Technical Knowledge and Research suggested the establishment of facilities to permit widespread use of anti-coagulant therapy in connection with arteriosclerosis and coronary heart disease, and the development of more satisfactory anti-coagulants.

The Section also pointed out that psychologists have shown by group tests that psychoneurotic patients whose blood pressure rises sharply under artificial stress may, under prolonged stress, actually develop hypertensive disease.

Physicians should not deal lightly with patients who think they have heart trouble but are actually suffering from an anxiety neurosis. These people require sympathetic assurance and psychiatric advice.

The Section on Community Services pointed out that "Heart disease will not be conquered by the lone wolf approach. A community needs an organized program to cope with heart disease, just as every town has an organized fire department to protect property."

Because heart disease is

often difficult to detect and usually of long duration, full use of community facilities was termed much more urgent than with other diseases. The pooled efforts of physician, scientist, nurse, social worker, teacher and layman are needed in a coordinated public health program. Citizens participation on the widest scale should be encouraged.

Mass screening methods available today could be put to more productive use to detect many undiscovered heart cases. This can be done in collaboration with other agencies.

There is inadequate knowledge of the cardiac's capacities as related to job requirements, and further studies are needed.

The Section on Professional Education called for medical education which would stimulate physicians to learn more about the emotional, environmental and community aspects of all diseases; to become more concerned with the social sciences, and more actively interested in preventive medicine.

The Section report further stated that undergraduate medical education requires not only more focus on the cardiovascular system, but the student also should learn to think of cardiovascular disease as a family problem affecting not just the patient but everyone in the home.

More information and emphasis on cardiovascular diseases should be made available in courses for other professionals such as nurses, social workers and teachers.

PHARMACEUTICAL DIVISION

BLISS C. WILSON, Editor

NEWER THERAPEUTIC AGENTS

by Edgar Parry, Instructor in Pharmacy
South Dakota State College

Antitubercular Drug Development

Within the last few years, Streptomycin and Dihydrostreptomycin have been accepted as the most effective drugs that can be administered in the therapy of tuberculosis. Unfortunately however, the use of Streptomycin has had to be governed by two circumstances. First, the incidence of side reactions to the drug is quite high. This has caused in some cases complete withdrawal of the drug. The use of antihistamines and development of Dihydrostreptomycin, a less toxic form of Streptomycin, has lowered the rate and intensity of side reactions sufficiently that the antibiotic can now be used in almost all cases where it is indicated.

The second obstacle to successful therapy with streptomycin is not so easily overcome. During the course of therapy, the tubercle bacilli develop resistance to the drug, and after resistant organisms are developed streptomycin therapy is no longer effective. It has been found that from 50 to 70 percent of the patients who are discharging the bacilli after 120 days, will have streptomycin-resistant strains present. The Veterans Administration reported that in a large series of patients studied, 60 percent of those having positive cultures after 90 days treatment with streptomycin, contained strains that were resistant in vitro to 10 micrograms of streptomycin per ml. of medium.¹ With this major objection in mind, research has been directed toward finding a tuberculostatic which can be alternated with streptomycin, thereby retarding the rate of development of the drug resistant strains.

Members of the sulfone group of drugs were tried with a degree of success. Promin and Sulfetron inhibited further growth, Sulfetron showing the fewer side reactions, but

neither could reduce the bacilli count by itself. Potassium Iodide was reported to give synergistic effects to Streptomycin in some cases. The sum total of all these drugs however was insufficient to meet the need.

In 1940, a research worker discovered that the oxygen consumption and carbon dioxide production of the tubercle bacillus are greatly increased in the presence of salicylic and benzoic acid.² These acids are oxidized by the bacilli as metabolites. Investigation of derivatives of these acids to find one which might have sufficient deleterious effects on their metabolism to prove bacteriostatic, showed 4-amino-salicylic acid or para-amino-salicylic acid, (PAS), to be most potent. Further investigations showed that in vitro, 0.15 mg. per 100 cc medium was sufficient to inhibit the growth of the BCG strain of tubercular bacilli. Experiments with mice showed that 1 and 2 percent concentrations in the diet would keep them free of the disease.

During the last two years, extensive work has been done with the drug to establish it as an antitubercular drug. Its activity, when used alone, has been found to be one third to one sixth that of streptomycin. When given with streptomycin it increases the antibiotic effect up to five times the normal. It would appear then to decrease the dose of streptomycin, and still obtain the full therapeutic effect while delaying development of resistant strains. It is especially useful in that it is effective against those bacilli which are streptomycin-resistant, and in addition no resistance develops toward PAS itself.

PAS has very little toxicity. It has a tendency to cause gastro-intestinal irritation, but this is overcome by encapsulating the drug, and taking the drug with food. The daily optimum dosage is 10 to 15 Gm. per day in 4

or more divided doses. When given in higher concentrations it gives toxic reactions. Although PAS is considered bacteriostatic, it will not free the body of the tubercle bacilli, so it is valuable only as an adjunct to streptomycin and rest therapy.

Recent interest in the United States has been centered on the thiosemicarbazone series of compounds.³ These compounds have already been investigated in Germany and the most effective one — TB1/698 — has been clinically tested on 7,000 patients. It is produced for investigative purposes under the name Tibione by the Schenley Corporation, and as Myrizone by the Squibb Company.

Tibione affects the bacilli directly, causing abnormal size, granular degeneration, and formation of thread-like and coccoid forms. The sulfur atom is thought to produce this effect since substitution of oxygen for the sulfur causes loss of the tuberculostatic effect. In the body, it breaks down into benzaldehyde and thiosemicarbazone, which are inactive and toxic. It is rapidly absorbed after oral administration, blood levels being at a maximum in one hour.

German clinical trials have shown it to be effective in laryngeal and intestinal tuberculosis, in lupis vulgaris, in pulmonary and genitourinary tuberculosis, and in tuberculosis empyema. It showed poor results when used in bone and joint, meningeal and miliary tuberculosis. The doses recommended are 50 mg. daily for the first week; 100 mg. daily the second week; and 200 mg. daily thereafter. Since it is not important to keep blood levels at their maximum concentrations, this dose may be given at one time or in 2 to 4 divided doses.

The toxicity of Tibione is higher than that of PAS. Gastro-intestinal distress, anorexia, and nausea usually accompany the first doses but subside later even through therapy is continued. Taking the drug with meals reduces these side effects. Continued gastro-intestinal disturbances cause temporary or permanent withdrawal of the drug in about 10 percent of the patients. Nausea and vomiting which starts after the drug has been administered for some time usually indicates liver impairment, and drug therapy should be stopped. The fatty infiltration and reticulosis which occurs in about 2 percent of the cases, is thought to be transient and reversible. High

caloric and protein diets with vitamin supplements and choline are indicated. Headache and dizziness have been observed and two deaths have been reported. These patients, however, received doses of approximately 1.0 Gm. daily.

Despite the apparent high toxicity of Tibione, no lasting effects have resulted when given in the recommended dosage. The body builds up a tolerance to the drug and the reactions disappear. It has been given for 10 weeks with no ill effects noted, nor have the bacilli built up any resistance to Tibione in that time. It is very active against the streptomycin-resistant bacilli.

A German report by Hurni³ on a comparison of PAS, Tibione, and Streptomycin showed the following results when given in various combinations in vitro: Tibione is not synergistic to PAS; 1/5 the minimum bacteriostatic concentration of streptomycin increased the effect of Tibione by 30 times, while the same concentration of streptomycin decreased the effect of the effective concentration of PAS by 10 times; 1/4 to 1/400 the effective concentration of PAS increased the effect of streptomycin 50 to 80 times, while the equivalent of 1/4 to 1/400 the effective concentration of Tibione increased the effect of streptomycin by 5 to 50 times. This would show that Tibione and PAS are best used as an adjunct to streptomycin rather than streptomycin as an adjunct to either of the others. Both drugs show sufficient promise to warrant full clinical trial.

Streptomycin may become the second-choice drug in Neomycin, a new antibiotic under investigation, lives up to advance promises. It was isolated from soil by Dr. Waksman, the discoverer of streptomycin, and has its origin from one of the streptomyces group of soil organisms. Tests of streptomycin and neomycin against *E. Coli* showed that in a nutrient agar containing 5 micograms of antibiotic per ml., no colonies of *E. Coli* developed from 22 billion cells after incubation for 9 days at 28°C. With streptomycin in the same concentration, a dozen or more colonies developed on each plate. Incubation for long periods of time showed that after an initial inhibiting concentration, there was no further development, which speaks not only for the stability of the drug, but also the fact that no resistance to the

drug developed on the part of the organisms.⁴

It is active against the same gram negative organisms as streptomycin. In vitro tests, show it to be quicker acting and more bacteriocidal against the tubercle bacilli, the anthrax organism, and intestinal protozoa. It was found effective against tubercle bacilli which were resistant to 5,000 units of streptomycin. It has checked cholera and rickettsialpox in mice.

Animal experiments have shown it to be highly effective in vivo also. It has a slightly lower margin of safety — 15 times the effective dose giving toxic reactions — but at proper dosage levels, the incidence of side reactions is slightly less than that of streptomycin. It is not absorbed from the intestinal tract so must be given by injection as streptomycin is.

From results of investigations, it appears that neomycin may be given alone as it is effective against sensitive and resistant strains, or in combination with streptomycin to make sure all strains are covered.

These three new drugs will receive extensive clinical investigation, especially against tuberculosis. Together with streptomycin and dihydrostreptomycin they present the doctor with the strongest therapeutic weapons against tuberculosis he has ever had.

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- (1) J.A.M.A. 138:584 (1948)
- (2) Bernheim, F.; Science 92: 204 (1940)
- (3) Am. Pro. Pharm. 16: 237-240 (1950)
- (4) Waksman, S. A. and Lechevalier, H.A.; Science 109: 305 (1949)

RESEARCH SOCIETY, INC. FORMED TO REPORT DRUG MARKET DEVELOPMENTS

The Research Society, Inc. has been formed to provide drug manufacturers with a practical and economical market research service, announces William T. Doyle, president.

Mr. Doyle reports that his organization has set up a well chosen national network of pharmaceutically trained personnel to gather market information requested by Research Society clients. The staff of the new organization has had wide experience in dealing with drug sales, distribution and market research problems.

One feature will be the Research Society's exclusive service, a "Prescription Audit Report." Through the careful selection of a number of busy prescription pharmacies

across the country — in both metropolitan and rural areas — pharmaceutical manufacturers will be provided with information regarding **new** prescription writing habits of physicians in the test cities and towns.

Headquarters of the Research Society, Inc. are located at 51 E. 51st Street, New York City.

CUFF NOTES

(Continued from Page 150)

2. Psychosomatic disease: because of fainting when getting out of bed (anemia).
3. Fibrositis: Shoulder pain (blood irritating diaphragmatic peritoneum).
4. Appendicitis: This diagnosis at least implies surgical care, but insist upon hospitalization.
5. Anemia: cause not searched for.

Any woman of the child bearing age who experiences sudden abdominal pain may have an ectopic pregnancy.

An exploration has far less risk than "watching the patient" at home, as relatives rarely call the physician unless acute shock develops.

Prognosis in Hypertensive Arterial Disease:

- Depends upon;
1. age of the patient
 2. duration of the disease
 3. prognosis of complicating pathology
 4. presence of renal complications
 5. presence of cardiac complications
 6. stage of pathogenesis of the H A D. an increase in any one or any combination of these increases the gravity of the prognosis.

From May and Williams.

Hypohydration for Poliomyelitis

T. E. Robinson of Salt Lake City has been using hypohydration in treatment of poliomyelitis with remarkable results. Such patients quickly become free from pain, usually in 24 hours or less. Paralysis is uncommon in patients who are treated early. The regime is simple, consisting of the intravenous injection of 50 cc. of 50% sucrose daily for five or six days, and the limitation of fluids to 800 cc. daily.

(Continued on Page 160)

AUXILIARY ACTIVITIES

On April 19th, your President together with Mrs. A. K. Myrabo of Sioux Falls, visited with the Eight District at their dinner meeting in Vermillion. Mrs. A. P. Reding of Marion, President of District Eight, presided at the meeting and a pleasing and varied program of entertainment was presented.

Your President spoke to the group on "The Doctors Wife and the Facts" and also recommended John T. Flynn's book "The Road Ahead," in which Mr. Flynn outlines the rise of Socialism in Britain and Russia. She also would like to recommend this book to each of you. It is sure to hold the complete interest of every Physician and his wife.

Thank you District Eight, for a very pleasant evening. Your kind hospitality was appreciated.

Convention plans having been changed, I journeyed to Huron on April 20th and met with District Five, to help formulate plans for the State Convention. Mrs. J. Tschetter and members of her district were most charming and gracious in accepting and shouldering the responsibility on such short notice. I am sure their splendid efforts and unfailing co-operation will not be in vain. It was nice meeting with all of you and I feel we are going to have a lot of fun working together.

Those who will have attended the Convention I know will derive many benefits from same, as Conventions serve as an experience exchange. The address of distinguished guests and the reports of Auxiliary Presidents and Committee Chairman provide a fund of information.

Conventions also have an appealing social side. They afford an opportunity for Doctors' wives through out the State to get acquainted with each other. You strengthen friendships begun at previous Conventions

and it affords you a chance to make new acquaintances. This holds equally true at National Conventions where one meets Doctors' wives from other States. When Conventions are not in session, everyone is ready for fun and there is nothing like a good time to make the members one happy family.

It is my hope that every Auxiliary member has a copy of the brochure, "Its your Crusade too." Procedures, which may produce results, are outlined in this pamphlet and I am sure will prove tremendously helpful.

Once again may I impress upon you the importance of "The Doctors Wife and the Facts." The field of health is so broad and of such vital interest to everyone. One soon learns the prime importance of being well grounded in facts. Opinions are not enough. They must be supported by facts. The valuable assistance the Woman's Auxiliary has given to the Medical Profession in recent years has stemmed from the interest in giving the public the facts. An informed public will never be misguided. The business of being well informed is a serious one. To acquire a fund in information about all phases of medical care, therefore, should be the aim of each individual member. By reading, through study groups, and by constant attention to new developments every member will rapidly make herself indispensable to her Auxiliary and to the Medical Profession.

Please District Presidents, kindly read and bring before Auxiliary members, at all your meetings, the communications sent out by your Officers and Chairman of standing committees. Do not let their efforts go in vain. They have prepared outlines, programs, suggestions from your President and recommendations from National Headquarters. It is not fair to your members, not to bring before the

meetings the important work that is being done. Your full co-operation is needed, especially in these uncertain times because of the threat to the American Democracy. Let there be discussions among the members on points of interest from these communications and find out what your Auxiliary is willing to do.

Impress upon your Husbands the importance of their bringing home the South Dakota State Journal. Keep in contact with the Auxiliary page. Your President feels that she can reach each individual member through the Journal and to some degree it lightens her burden for she is able to cut down her letter-writing a small fraction.

Truly, the new interest shown by our District Auxiliaries is indeed gratifying. I firmly believe that this interest will grow in the cause of American freedom.

Members of The Executive Board were guests of Mrs. William Sercl at a luncheon at the Town Club, Sioux Falls, on March 30th. Following is a report of the Minutes of the meeting:

First meeting of the Executive Board of the Women's Auxiliary to the South Dakota Medical Association, was called by the President Mrs. William Sercl, at her home March 30th, 1950. The following members were present: Mrs. William Sercl, Mrs. C. E. Sherwood, Mrs. A. P. Reding and Mrs. Howard Wold. The following Chairman were also present: Mrs. J. Clark, Mrs. Anton Hyden and Mrs. V. V. Volin.

Mrs. Sercl reported on the printing of the Constitution and by-laws of the Medical Auxiliary as requested in its 1949 session. It was moved by Mrs. Volin and seconded by Mrs. Reding, that the President have copies mimeographed and distributed to District Presidents and members at large. This motion carried unanimously.

Article 6, Section (b) on Elections was discussed. It's reading was "All Officers except recording Secretary and Treasurer shall be elected for one term only." This was amended to read: "All Officers shall be elected for one term." A motion for this wording was made by Mrs. Volin and seconded by Mrs. Reding and the motion carried. The President appointed the following Auxiliary members on the nominating committee, to secure a slate

of Officers for the coming year.

Mrs. J. H. Lloyd, Mitchell

Mrs. J. A. Nelson, Sioux Falls

Mrs. C. E. Sherwood, Madison

This selection was approved by members of the Executive Board.

A motion was made by Mrs. Volin that all visiting National Representatives of the Auxiliary be presented a gift symbolical of South Dakota. Motion seconded by Mrs. Hyden. Motion carried unanimously.

Motion for adjournment was made by Mrs. Clark and seconded by Mrs. Sherwood.

Mrs. William Sercl, President,

Woman's Aux. to the S. D. State Med. Assn.

THIRD DISTRICT MEETS

The Third District Medical Auxillary entertained the doctors at a dinner April 1, at the Hotel General Beadle in honor of National Doctor's Day. Doctors and their wives from Brookings, Flandreau, Volga, Estelline and Madison were present.

Table decorations were cleverly arranged by Mrs. D. S. Baughman using bottles and jars commonly seen in doctor's offices, combined with flowers and candles. Place cards and nutcups using decorated pill boxes and pills were used.

The group went to the home of Dr. J. A. Muggly where a program of music by Georgeane Whitson, accompanied by Mrs. Ross Kelly, and Shirleen Muggly was given.

The remainder of the evening was spent playing bridge and canasta with prizes in bridge going to Dr. Howard Wold and Dr. Magni Davidson and canasta prizes going to Dr. George Whitson and Dr. A. Peeke.

CUFF NOTES

(Continued from Page 158)

Veratrum Viride for Acute Hypertension

The most dramatic reducing effect on hypertension occurs when veratrum viride is given orally in cases of hypertensive encephalopathy and myocardial failure secondary to hypertensive crisis. There is an increase of cardiac output, a slowing of the pulse rate and a disappearance of pulsus alternans. E. D. Freis, J.A.M.A. May 21, 1949.

Edited by Don Manning, M.D.
Sioux Falls, S. D.

Chemosurgical Treatment of External Cancer: A Microscopically Controlled Method of Excision

Frederic E. Mohs, M.D., Madison, Wisconsin

The term "chemosurgery" was coined to designate a newly-developed method for the excision of cancer under complete microscopic control. The "chemo" part of the word implies that the tissues are chemically treated while the "surgery" part indicates that the tissues are surgically excised, but it should be emphasized that these features are merely contributory to the most important feature, the microscopic control.

The idea of a microscopically controlled method of excision had its origin in 1932 in an incidental observation made with Professor M. F. Guyer during the course of experiments on the leukocytic reaction to irritants in cancerous and normal tissues. One of the injected irritants happened to be a 20 per cent solution of zinc chloride. This chemical killed the tissues and yet, upon microscopic study, the histologic structures were observed to be well preserved. The tissues had been fixed in situ the same as if they had been placed in a bottle of fixative solution. During the ensuing four years various details of the technic were worked out in the laboratory.²

Many different chemicals were tried as in situ fixatives. Some of them, such as the arsenic, mercury, and antimony salts, were found to be too toxic. Some, such as the caustic alkalis, caused excessive destruction of the tissues so that microscopic diagnosis was impaired. Other chemicals had other disadvantages. Zinc chloride proved to be the most favorable chemical tried because of the following properties: (1) as used in the treatment of cancer it was essentially non-toxic

systemically, (2) it penetrated the tissues readily and in a controllable manner, (3) it was safe to handle because it did not penetrate the intact skin, (4) it was nonodorous and (5) healing of the tissues following its use was excellent. This chemical has long been used in the treatment of cancer both by ethical and unethical practitioners, but there was never any thought of microscopic control.

Various means of administration were tried. Injection gave erratic penetration and it was found to be too dangerous in that many of the animals died immediately after injection. The application of solutions to the surface of the tumor resulted in poor and erratic penetration. The best means of administration proved to be the application of a paste which contained zinc chloride. The base consisted mainly of stibnite, an inert, finely granular material. This material held the solution of zinc chloride very loosely and allowed it to be released readily to the tissues. Moreover, the stibnite provided a highly permeable matrix, permitting the solution of zinc chloride to sink through the entire applied layer of paste. This in turn made it possible to vary the depth of penetration into the tissues by simply altering the depth of application of the fixative paste. By virtue of this feature, the depth of fixation could be accurately varied from a fraction of a millimeter to well over a centimeter in 24 hours.

Would chemical treatment of cancers have a tendency to increase metastasis? To answer this crucial query, 114 rats bearing Flexner-Jobling carcinomas were paired off into control and treated groups. The treated groups received repeated, small, subcurative, intratumoral injections of zinc chloride every other day for a period of 4 to 8 weeks. The incidence of metastasis was only 28 per cent in the injected rats while the incidence in the controls was 41 per cent. If anything, the treatment reduced rather than increased metastasis.

Presented at the sixty-eighth meeting of the South Dakota State Medical Association, May 23, 1949. The paper was also presented at the California State Medical Association meeting, and this article, with minor changes, is reprinted from CALIFORNIA MEDICINE through the courtesy of the editor Dr. Dwight Wilbur.

From the Chemosurgery Clinic, Department of Surgery, University of Wisconsin Medical School, Madison.

TECHNIC

The technic by which the microscopic control of excision was attained was partially worked out in animals and then perfected during the course of the treatment of about 2,500 patients in the past 13 years. The technic now used may be described with the aid of the accompanying diagram of a cutaneous cancer with three irregular extensions from the main mass (Fig. 1).

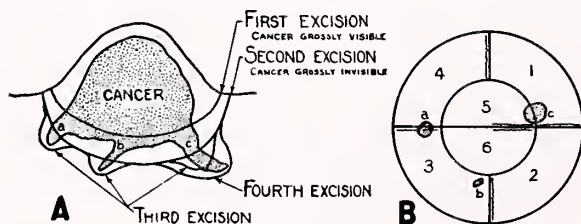


Figure 1. — A, diagram of a cancer with three slender extensions protruding from the main mass. The levels of the four excisions are indicated. B, map of the second excised layer showing the origin of each of the six specimens. Frozen sections were cut through the under surface of each specimen and the areas of cancer at a, b, and c in A were located by scanning the sections under the microscope. Reapplication of the fixative was limited to the cancerous areas. Two more excisions were required to eradicate the cancer.

In cancers covered by skin, the first step in the technic is the application of a keratolytic agent such as dichloroacetic acid (Eastman) to render the surface keratin permeable to zinc chloride. The acid is applied until the skin turns white indicating penetration of the stratum corneum. If the lesion is large or in a sensitive area it may be desirable to precede this application by the administration of an analgesic of a potency ranging from that of acetylsalicylic acid to that of morphine and in some cases local anesthesia produced by the injection of 1 per cent procaine is desirable. The next step is the application of the zinc chloride paste which is composed of 40 grams of stibnite, 10 grams of powdered sanguinaria and 34.5 cc. of a saturated solution of zinc chloride. This paste is applied in a depth calculated to penetrate through as much as possible of the grossly visible portion of the cancer. Analgesics are ordered to be given as necessary.

After a period of time, usually 24 hours, the layer of fixed tissue is excised with a scalpel. The incision is made through the fixed tissue just distal to the junction with the living

tissue; therefore, there is no pain or bleeding from the incision unless it is inadvertently carried too deeply. Often, as in the example illustrated in figure 1, it is possible grossly to visualize the cancer tissue at this stage as a white, crumbly material. When this is the case, the fixative paste is immediately re-applied after the removal of a specimen for microscopic diagnosis.

After another period of 24 hours, another layer of fixed tissue may be excised. If the cancer tissue is not grossly visible at this level, the entire area under suspicion is subjected to systematic microscopic examination. This examination is accomplished as follows: after the careful removal of intact flat specimens, the origin of each of which is indicated by markings with merbromin on the lesion and by a map drawn on a pad of paper (Fig. 1B), frozen sections are cut through the under surface of each of the specimens. Facilities for the rapid preparation of the special type of frozen section³ are provided in the chemosurgery clinic so that, after a few minutes, the operator may scan the sections under the microscope, locate the areas of cancer, and mark them in red pencil on the map. Reapplication of the fixative paste is then limited to the areas found to contain cancer (areas a, b, and c in Fig. 1B). The following day the tissues from these areas are excised and the procedure is repeated until a completely cancer-free plane is reached. In effect, this technic provides a means for the selective destruction of cancer because only one or two millimeters of healthy tissue beyond the extent of the cancer at any given point need be removed.

After an interval of from 3 to 10 days, depending upon the location of the lesion, the final layer of fixed tissue separates spontaneously or may be removed by the cutting of the holding strands. The resultant granulation tissue is exceptionally healthy, well vascularized, and resistant to infection. It supports the very rapid epithelization of the wound with resultant soft, smooth, pliable scars which are surprisingly good from a cosmetic standpoint.

INDICATIONS

The microscopic control of excision afforded by the chemosurgical method is useful in the treatment of most accessible forms of cancer.⁴ Articles have been published concern-

ing the chemosurgical treatment of cancer of specific sites such as the lip,⁵ nose,⁶ ear,⁷ eyelids,⁸ face,⁹ extremities and trunk,¹⁰ skin,¹¹ and parotid gland.¹² In addition, the technic is of value in the treatment of cancer of the mouth, nasal cavity, larynx, vulva, vagina, penis, anus and lower rectum. A few remarks concerning the treatment of some specific forms of cancer follow:

Cancer of the nose. Microscopic control of excision is particularly valuable in the treatment of nasal lesions because it is difficult to estimate accurately the extent of cancer of this structure by clinical examination alone. The reasons for this poor accuracy are twofold: First, the induration characteristic of skin cancer has about the same consistency as the fibrocartilaginous tissue of the nose making it difficult to differentiate one from the other by palpation. Second, cancer often extends in a surprisingly irregular and unpredictable manner through the various tissues of the nose; this tendency is particularly striking in the tissues of the nasolabial fold (Fig. 2), the root of the nose near the

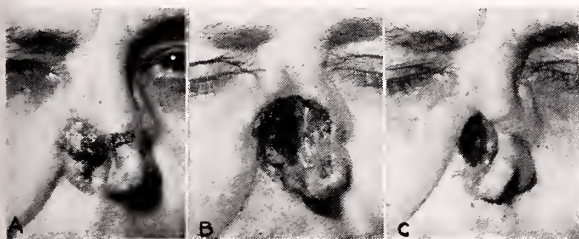


Figure 2. — A, basal cell carcinoma. This highly invasive neoplasm was excised in eight microscopically controlled stages by the chemosurgical technic. It extended considerably farther in some directions than was indicated by the initial examination. B, the granulation tissue after separation of the final layer of fixed tissue. C, healed lesion before the plastic repair. The patient was free of cancer after eight years.

inner canthi and the septum. Under the full microscopic control afforded by the chemosurgical method the "silent" extensions may be accurately followed out and eradicated. Lesions which are radio-resistant or difficult to treat adequately due to the proximity to cartilage or bone are especially suited to chemosurgical treatment, as are neoplasms which are so extensive that ordinary surgical excision would produce massive deformities and destruction of vital structures.

Cancer of the ear. With the chemosurgical technic, neoplasms of the pinna (Fig. 3) and of the external auditory canal may be removed with great assurance of complete eradication and yet with minimal destruction of normal tissue. The conservatism is especially important in aural lesions because the reconstruction of large defects of the ear is often a difficult and time-consuming procedure.

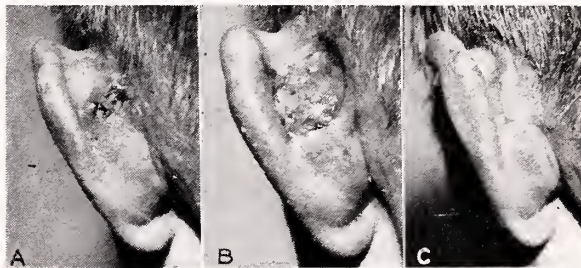


Figure 3. — A, squamous cell carcinoma which had recurred after electrodesiccation on two occasions. Chemosurgical excision was accomplished in four microscopically controlled stages. B, granulation tissue after separation of the final layer of fixed tissue. C, healed lesion. There was no evidence of cancer after two and one-half years.

Except in very early lesions the carcinoma almost invariably extends to the perichondrium and therefore the usual technic is to chemosurgically excise the grossly visible portion of the neoplasm down to the cartilage and then to section the periphery until a cancer-free level is reached at all points. The portions of the cartilage acted upon by the fixative are excised unless the area is small, in which case granulation tissue may cover the fixed cartilage and allow epithelization to take place.

Cancer of the eyelids. Unless there is actual invasion of the eyeball, it is possible to remove almost any cancer of the eyelids without danger of damage to the eye. The chemosis and the edema of the eyelids (Fig. 4B) due to the chemical inflammation produced by the fixative, are protective because they tend to push the treated area away from the eyeball. Another safety factor is the flow of tears which carries away the fixative chemical as it slowly permeates through the eyelid. The cosmetic results are often surprisingly good (Fig. 4D), and even if the cancer extends for a considerable distance into the orbit it usually is possible to preserve a functional eye.



Figure 4. — A, basal cell carcinoma, recurrent after electrodesiccation. B, lesion two days later. The markings on the fixed tissue indicate the origin of the five specimens. Frozen sections revealed the presence of carcinoma in two areas in the center of the lesion. These areas were free of cancer on the next day. C, granulation tissue four days after the last application of fixative. D, healed lesion. There was no evidence of cancer after one and one-half years.

Cancer of the face. The chemosurgical treatment of cancer in areas of the face other than the nose, ears, and eyelids has been described.⁹ Often it is feasible to remove extensive recurrent lesions without appreciable disfigurement (Fig. 5).

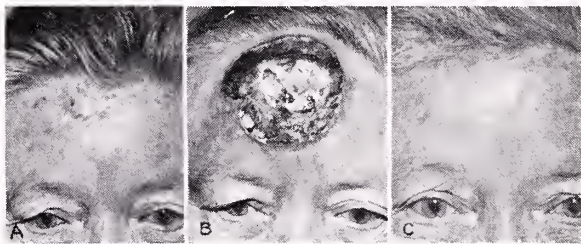


Figure 5. — A, basal cell carcinoma, recurrent after electrodesiccation and after roentgen ray treatment on two occasions. B, lesion after ten microscopically controlled excisions showing the great discrepancy between the actual extent of the cancer, shown here, and the apparent extent as judged by the appearance before treatment. Besides two deeply penetrating extensions near the center of the lesion there was peripheral extension of the highly invasive carcinoma for distances up to 2 centimeters beyond the grossly visible peripheral limits. C, healed lesion. Note the excellent cosmetic result attained without the use of graft. The patient was free of cancer after two and one-half years.

Cancer of the extremities. By means of the microscopically controlled chemosurgical technic, it is often possible to be more con-

servative than with the usual surgical technics. This conservatism is of particular concern when the involved structure is as economically important as the hand (Fig. 6).



Figure 6. — A, squamous cell carcinoma. B, granulation tissue after chemosurgical excision in three microscopically controlled stages and after separation of the final layer of fixed tissue. C, healed lesion. The function of the hand was normal despite the fact that the cancer extended onto one of the tendons. There was no evidence of cancer after six years.

Carcinomas that develop in radiated skin on the hands of physicians and dentists have proven to be especially responsive to chemosurgical treatment.

Cancer of the lip. Squamous cell carcinoma of the lower lip may be effectively and conservatively treated by the chemosurgical technic. The cosmetic results are excellent (Fig. 7). As with squamous cell carcinoma in



Figure 7. — A, squamous cell carcinoma. B, granulation tissue after chemosurgical excision in four microscopically controlled stages and after separation of the final layer of fixed tissue. Note the conservatism which may safely be practiced with this technic. C, healed lesion. There was no evidence of cancer at the primary site or in the regional nodes after two years.

other sites, it is essential to carefully examine for metastatic regional nodes. If enlarged nodes are present a surgical neck dissection is indicated. If no enlarged nodes are not found but the primary lesion is large and the grade

of malignancy relatively high, it may be advisable to recommend a prophylactic radical neck dissection.

Melanoma. Since melanoma frequently spreads into the lymphatic vessels adjacent to the primary lesion, it is essential to remove an area of tissue well beyond the microscopically determined extent of the primary melanomatous mass. The amount of tissue removed depends upon the size and degree of malignancy of the primary melanoma (Fig. 8). Surgical dissection of enlarged regional

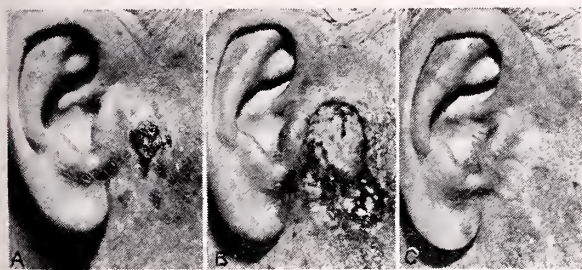


Figure 8. — A, melanoma which arose in a junctional nevus. B, granulation tissue after chemosurgical excision of the melanoma and the nevus plus an additional several millimeters. Had this melanoma been larger, a wider zone of tissue beyond the microscopically determined confines of the primary mass would have been removed. C, healed lesion. There was no evidence of melanoma after five years.

nodes should be performed if possible. Prophylactic dissection of nodes in the absence of enlargement may be advisable in some cases. Frequent post-operative observation is essential.

DISCUSSION

The microscopic control of excision makes possible the unprecedented reliability and also the conservatism of the chemosurgical treatment of cancer. The main reason for the need of microscopic control is the frequent presence of small-caliber, clinically undetectable outgrowths from the main mass of cancer.

That the method is capable of results which compare favorably with the best results obtained with other methods is indicated by the accompanying statistics (Table 1). It is to be

Table 1. — Rate of Cure of Cancer of the Skin at Three Years

	Percent
Present series, ¹¹ 814 cases	93.6
Magnusson, ¹ Radiumhemmet	88.0
Poppe, ¹³ Norwegian Radium Hospital	80.8

remembered that the present series includes many extensive and recurrent cancers; in fact, a number were considered inoperable as far as ordinary surgical technics were concerned.

The conservatism is obvious when it is considered that only one or two millimeters of tissue beyond the actual extent of the cancer at any point need be removed.

In addition to the advantages of reliability and conservatism, there is also the advantage of a very low operative mortality rate. In a recently published series of 814 cases of cancer of the skin,¹¹ there was only one operative death. This death occurred in a patient with extensive cancerous invasion of the frontal lobe of the brain.

Disadvantageous features of the method include, first, the necessity for special training and constant practice in the use of the technic for optimum results and, second, the necessity of having special facilities and technical assistants for the preparation of the unusual type of frozen sections. In addition, the chemosurgical treatment of extensive cancers may be time-consuming and tedious work for the operator and a painful experience for the patient; but inasmuch as these lesions would otherwise carry a very poor prognosis, these disadvantages seem relatively inconsequential.

In addition to the wide variety of accessible neoplasms amenable to chemosurgical treatment there also are other lesions, for example those of gangrene,¹³ for which the technic is useful. Thus, there is a sufficiently wide field of usefulness to justify the establishment of chemosurgery clinics at strategic points throughout the country.

CONCLUSION

The microscopic control of excision afforded by the chemosurgical method is responsible for the unprecedented reliability and also for the conservation attained with this treatment for accessible forms of cancer.

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Lifted from the Journal of:

Illinois

Since the passage of the Searcy-Clabaugh Act by the General Assembly in 1943, attention has been focused upon the State of Illinois as a proving ground for a new concept of local health services, legally free of politics, supported by a direct annual tax levy for health purposes only, manned by a professional staff with qualifications approved by the State Department of Health, and managed by a non-political Board of Health of seven members, consisting of two physicians, one dentist, and four other members to be selected for their "special fitness." An important feature of the Searcy-Clabaugh Act is that County Health Units, once established, — cannot legally be abolished, except by the same method by which they were established. This, it seems, is a very wise provision.

Wisconsin

On September 16, 1949, the Wisconsin State Board of Health approved the use of BCG in the state of Wisconsin under the protocol of the Research Foundation, in groups recommended by the American Trudeau Society.

The Board wishes to cooperate by extending its approval to individual projects which come under these safeguards.

The evidence available by which one can judge the efficacy of BCG is based to a large extent upon experiments which can be criticized because of either improper selection of controls, a short duration of observation, or the difficulty of evaluating an immunization procedure where one must of necessity base his conclusions on the prevalence of mortality. However, even though of limited duration, well controlled studies in the United States, such as those of Aronson and Palmer, indicate that a degree of protection is offered; therefore, it looks to your Board of Health as though persons responsible for preventive medicine must reexamine the feasibility of offering BCG to certain indicated groups. —A. R. Zintek, M.D.

West Virginia

For the third consecutive year, the widow of a doctor has been named West Virginia's "Mother of the Year." The selection of Mrs. James C. Dunbar, of Gauley Bridge, for this honor has been announced by Mrs. Dale Thomas, of Charleston, chairman of the West Virginia American Mothers Committee of the Golden Rule Foundation, created for the purpose of recognizing some state mother for this honor.

Hawaii

AFTER SAN FRANCISCO . . . HAWAII

The luxury of a vacation in the mid-Pacific Paradise of Hawaii will be closer than ever before to hundreds of doctors and their families when they convene in San Francisco June, 1950.

Nine hours by air or four and one-half days by cruise ship, Hawaii is ready to entertain the nation's doctors with an itinerary that will leave nothing to be desired in the enjoyment of a Hawaiian vacation. Swimming, sunning, sailing, surfing, outrigger canoeing, golfing, Hawaiian feasts, hula shows, fishing festivals and sightseeing in the typical Hawaiian manner will be highlighted by the more exotic crossroads activities such as Chinese and Japanese teahouse dining. Through all of this will be the fellowship of Hawaii's doctors and their families who are anxious and ready to extend their personal hospitality to their professional fellows and families from the mainland.

Female Pelvic Surgery: When Is It Necessary*

by E. Stewart Taylor, M.D., Denver, Colorado

(From the Department of Obstetrics and Gynecology, University of
Colorado School of Medicine)

Because surgery is an excellent and dramatic cure for many diseases, it has been tried and is being tried for the relief of a multitude of female complaints. In the quest for a cure for pelvic pain, menstrual irregularities, infertility, and leukorrhea, the normal uterus and ovaries have been excised, incised, suspended, curetted, resected, and explored by laparotomy. As one wag has put it, his community of pelvic surgeons has a "blue plate special, which includes diagnostic curettage, cauterization of the cervix, perineorrhaphy, uterine suspension, bilateral ovarian resection, and appendectomy for \$150."

In this discussion we will omit treatment of gynecological cancer and the grosser disturbances that include large cystic or solid ovarian tumors. These more obvious conditions affect only a small percentage of gynecological patients. Such derangements of growth pattern are usually quite easily diagnosed; the patient understands the necessity for surgical treatment and accepts its rationale. The indications for operation and the surgical procedures necessary for definitive treatment of cancer and the large pelvic tumors are well standardized and accepted. Most surgeons doing pelvic surgery for these conditions have good results. The results are governed more often by the total general condition of the patient than by surgical judgment or skill.

We should be seriously concerned about the large number of ovaries and uteri that are needlessly sacrificed each year. Hospital staffs are continuously seeking to improve the work of their members by regulating the amount of surgery done upon the normal female pelvis.

Many unnecessary operations are performed because physiological changes are

mistaken for pathological conditions. When is an ovary pathological and when is it normal? The ovary in women between 14 and 48 (approximately) is a functioning organ that goes through a follicular phase and a corpus luteum phase each month. The physiological process is always characterized by some degree of ovarian enlargement. At times the enlargement or cyst formation is more marked than it is at others. The physiological process is known to extend even beyond the normal 28 day cycle. A follicle or a corpus luteum may infrequently become a cyst 5 cm. in diameter. The normal processes of female physiology usually cause such a cyst to disappear spontaneously within 5 months. It is exceedingly rare that such a persistent follicle cyst or corpus luteum cyst will cause pelvic pain of any degree. This is not to say that pain will not be present in the same patient, but experience has shown that there is usually no relation between the pain and the incidental finding of a small ovarian cyst. When a cystic enlargement of an ovary is felt upon bimanual examination, the patient should be re-checked for 5 months. If the cyst has persisted for 5 months, or enlarges, laparotomy is indicated. Very few cysts fail to disappear of their own accord if time is given. Solid ovarian tumors present a different problem. All solid ovarian tumors demand operative removal. This is true because an extremely high per cent of solid ovarian tumors in all age groups are malignant. Hundreds of normal ovaries are removed in hospital operating rooms each day. They are removed because the operating surgeon honestly assumes he is dealing with a pathological process instead of a normal follicle cyst or corpus luteum cyst of the ovary.

If ovaries containing physiological functioning apparatus are not removed, many are subjected to partial surgical resection. This procedure has been found to have no general

* Presented at the sixty-ninth meeting of the South Dakota State Medical Association, May 1950.

or specific benefits, and may produce undesirable aberrations of menstrual function. Ovarian suspension has been found to be a futile operation. It once was applied unsuccessfully in the treatment of menstrual irregularities and for the relief of chronic low grade pelvic pain.

In an analysis of 461 small ovarian cysts followed over a period of 6 months to a year or at operation, Miller¹ found that 447 or 97% were simple follicular or corpus luteum cysts. Cooke² found that 99% of cystic ovarian tumors under 5 cms. in diameter fell into the retention cyst group. His analysis included 753 cystic ovaries of this size.

The question naturally arises as to the relationship of these small ovarian cysts to signs or symptoms that the patient may present. Some men have felt that these retention cysts may bear a relationship to menstrual irregularities, pelvic pain or sterility. Miller¹ found in his large series that 61% of his small cysts were accompanied by no symptoms. In the remaining 39%, disappearance of either cyst and symptoms or persistence of both cyst and symptoms warranted doubt as to the existence of any cause-and-effect relationship.

The second most often applied operation upon the female organs is hysterectomy. To remove an essentially normal uterus from below as part of an operation for the cure of uterine prolapse is an acceptable procedure in women at, near, or after the menopause. However, the removal of the uterus vaginally in vaginal plastic operations is only an incidental procedure in the accomplishment of the cure for prolapse. The essential portion of the operation is plastic repair of the ligamentous support to the pelvic structures. It is now agreed that hysterectomy, uterine suspension, or ventro-fixation of the uterus to the anterior abdominal wall are not satisfactory surgical procedures to correct uterine prolapse. The reason for their condemnation is their ineffectiveness in curing prolapse.

What about retroversion? What is a symptomatic retroversion? Backache is not a symptom of a retro-flexed uterus. Neither will correction of the retroversion correct the

backache. Infrequently one finds a tender, fixed, non-replaceable retroverted uterus. Along with the retroverted uterine fundus one is able to palpate one or both ovaries prolapsed into the cul-de-sac. Bimanual examination of the prolapsed ovaries produces pain which is not unlike the dyspareunia of which the patient complains. This type of patient we put on knee-chest exercises for two or three months and periodically try to correct the retroversion in the office or clinic. If at the end of this time the patient still complains of dyspareunia and chronic pelvic pain, laparotomy is recommended. One may discover endometriosis that has caused the fixed, tender retroversion. Or, he may only find the edematous, engorged, retroverted uterus. Simple suspension is all that is done. We do not otherwise advise surgical correction of a retroverted uterus. We recognize the great majority of retroverted uteri should remain as such. There is no evidence that retroversion impairs fertility or causes abortion.

Many abdominal operations are done for the purpose of controlling menstrual excesses in young women. If the uterus is normal in size and shape and if simple office therapy of a few weeks' duration does not correct the abnormal bleeding, the next step in diagnosis and treatment should be endometrial curettage. This simple step provides microscopic diagnosis, is hemostatic, and in about one-third of cases is curative from six months to permanently. Hormones are very useful in the control of adolescent uterine bleeding. Likewise during the childbearing years hormones are very helpful after the proper diagnosis has been made by curettage. Partial ovarian resection should never be performed for the control of benign endometrial bleeding during the childbearing age. Hysterectomy for the treatment of uterine bleeding in women under 40 is very rarely, if ever, indicated. Usually simple curettage and hormonal methods will control the irregular bleeding. If, finally, after conservative treatment and careful study the bleeding continues, hysterectomy may be indicated. Hysterectomy then is an admission of defeat and should be viewed in the same light as

colectomy in the treatment of ulcerative colitis. It is only recommended after all else has failed.

In the management of severe menstrual excesses that may occur in women from forty to fifty years of age, a different problem arises. At or near the menopause, the function of ovulation becomes irregular. Thus the endometrium is no longer controlled by the two hormones, estrogen and progesterone. The prolonged stimulation of the pre-menopausal endometrium with estrogen without the interaction of progesterone hormone leads to profuse uterine hemorrhages and hyperplasia of the endometrium in some cases. We have found that the use of hormones as a method of controlling menstrual excesses in women forty or over to be unreliable and unsatisfactory. In this age group, our treatment of severe menstrual excesses from an otherwise normal uterus is curettage. At times, only observation is necessary since Nature may bring about a spontaneous cure. If there is recurrence, a second or third curettage may be helpful. If by the second or third curettage the bleeding has not come under control, total hysterectomy or irradiation is recommended. An endometrial polyp may be the cause of the persistent bleeding in these cases.

Thus far, we have discussed the enlarged ovary, the mal-placed, and the bleeding uterus in relation to surgical necessity. The symptom of "pelvic pain" brings large numbers of women to doctors' offices. It has been said that a headache or an angina pectoris pain is the male outlet for worry, frustration, fear, and overwork; but, it is the pelvis which is the focus of pain when a woman meets these problems. In our clinic we examine more patients with unilateral and bilateral pelvic pain than with any other complaint. By the time we see them it has been agreed that the pelvis is negative for organic pathology. The superficial history is not too helpful. After further and repeated examinations and interviews, one is usually able to gain insight into the total patient and the problems in her environment that have brought her complaining of pelvic pain. Such problems as marital sexual maladjustment, a wayward husband, or cancer phobia usually reveal themselves. These conditions need more direct and scientific management than bilateral wedge-shaped resection of the ovaries, appendec-

tomy, and uterine suspension. One patient came to us in fear because her doctor had recommended the removal of her normal uterus for her nervousness. In his opinion her nervousness was caused by dread of added pregnancies. His suggestion multiplied the patient's problems. Bennett,³ in a recent paper, has pointed out the problems of the misdirected surgical attack upon female psychogenic complaints. He reported 121 patients who had been operated and re-operated for a total of 205 surgical operations before their disease process was finally diagnosed as being psychosomatic in origin. We see many patients who have had appendectomy and resection of the right ovary. For some reason it is always the right ovary that "catches it" in one of these right lower quadrant operations for pelvic pain.

You are all familiar with the patient who has two or three or four healed lower abdominal surgical scars. Her complaint is pelvic pain of long duration. The pelvic examination presents no essential findings. A study of previous hospital records reveals that the first operation was performed for the same complaints registered currently. The pathology report of the first operation reads, "Chronic appendicitis, follicle cyst, right ovary." The second operative report gives the pre-operative diagnosis of "Adhesions and cyst on left ovary." The operative report gives the procedure as, "Freeing of adhesions, partial resection of left ovary and uterine suspension." Later operative reports are variations on this theme. The important lesson here is that the patient is still complaining of the original symptoms that led to her first operations. She has lost faith in the medical profession, and pelvic surgery has earned a dissatisfied customer. Such a patient as described practically always has personality problems or conflicts that find focus in pelvic pain.

Many times patients are operated upon for relief of pelvic pain that presumably is associated with pelvic inflammation. One hears from patients and reads in hospital charts the term "thickening of the adnexae." This is a physical finding-or is it a finding-of which one should beware. When such a case comes to operation, no pathology is found and the time is spent while in the pelvis adjusting

existing normal structures. A chronic cervicitis with or without an accompanying old healed parametrial scar may be tender and may produce pelvic pain. The proper treatment, however, should be directed towards eradicating the cervical infection. Following this the pelvic pain will leave.

What should one do in the surgical treatment of true chronic pelvic inflammatory disease which is residual to a previous acute gonorrheal salpingitis? The treatment of chronic pelvic inflammatory disease should be conservative and along medical lines until the decision is obvious that the degree of discomfort and disability suffered by the patient is causing her to be ineffective in her role.

In regard to surgical treatment of pelvic inflammatory disease our philosophy is that of Mengert's,⁴ namely: "Removal of the fallopian tube without the accompanying ovary is seldom indicated in pelvic inflammatory disease because of the technical difficulty of separating the tube from the ovary without seriously jeopardizing the blood supply of the latter. The ischemic ovary becomes large, cystic, and painful at a later date. It is strongly emphasized that the ovary and its tube be considered as an entity, and spared or removed together. Acceptable operations for pelvic inflammatory diseases, therefore, would include unilateral salpingo-oophorectomy when most of the disease is concentrated on one side; or unilateral salpingo-oophorectomy and total hysterectomy; or complete ablation of the genitalia. It should be stressed that hysterectomy for pelvic inflammatory disease must be total and include the cervix; otherwise a focus of infection remains and usually necessitates later operation."

"On the other hand, with ectopic pregnancy, the ovary may not be involved. In this case it is highly desirable to remove the tube and allow the ovary to remain. The situation here is quite different from that of inflammatory disease, since lack of inflammatory reaction permits retention of an uninvolved ovary without jeopardy of its blood supply."

The last problem that I wish to discuss briefly is hysterectomy. The frequency with which the normal uterus is removed is of deep concern to the medical profession. Normal Miller,⁵ during the first four months of 1945,

gathered data upon 246 hysterectomies performed in ten different hospitals, in ten communities, and in three midwestern states. Dr. Miller's data must give us cause for serious thought. In 17.4 per cent of the 246 hysterectomies the patients' histories revealed no complaints. In an additional 9.7 per cent of cases the patients' symptoms were such sundry affairs as nervousness and headache. He then listed the pelvic findings given by the various surgeons previous to operation. In 18.6 per cent of patients, the pelvis contained no organic physical finding. A study of the various pathologies found at operation revealed that 30.8 per cent of the 246 uteri were removed for no apparent reason. Interesting to note is that the pathologist confirmed the surgeon's pre-operative diagnosis in only one-half the cases. However, because of uterine bleeding and genital relaxation, an additional 17 per cent of operations were justified in spite of absence of microscopic or gross uterine pathology. Dr. Miller concluded that two-thirds of the 246 hysterectomies under consideration were done with valid indication. In the other one-third of cases no valid indication for hysterectomy existed.

Uterine enlargement not accompanied by bleeding or other symptoms, is not an indication for surgery, unless the uterus is larger than a ten weeks gestational uterus. Many gynecologists have followed patients with asymptomatic myomata for many years. Unless the myoma becomes tender, or grows rapidly, or produces other symptoms, it need not be removed. The threat of malignant degeneration in a myoma is extremely remote.

The symmetrically enlarged uterus need not come to hysterectomy. Adenomyosis of the uterus or fibrosis uteri may be present with no symptoms whatsoever. In these cases no treatment is necessary. One often finds this condition on routine pelvic examination; characteristically the uterus is firm, two times normal size, and non-tender. If the patient complains of severe acquired dysmenorrhea and has the signs of adenomyosis, hysterectomy is good treatment.

Puerperal subinvolution of the uterus is never an indication for hysterectomy.

Myomectomy for symptomatic uterine myomata in young women is a safe and satis-

factory operation and can be used much more often than it is. It is a tragedy to remove the uterus of a young woman for fibromyomata, and in most cases such a radical step can be avoided by myomectomy.

Those performing hysterectomies should strive towards consistent performance of the total operation. Frequent development of cancer of the cervix in a cervical stump residue to subtotal hysterectomy is sufficient reason for such a recommendation.

Pelvic pain may arise from many sources other than the uterus and its adnexae. Skeletal back pain from muscle joints and ligaments of the spine and pelvis are extremely common and produce pain referable to the pelvis. The spastic colon or the urinary tract pain are well known producers of pelvic pain and tenderness. The normal uterus anteriorly or posteriorly placed, or the slightly enlarged ovary do not cause pain. We must look elsewhere for the explanation of the symptoms, and must withhold misdirected surgical enthusiasm.

Gynecology is a field where even at best, the per cent of accuracy in diagnosis is low. One must, because of this, be extremely careful in the recommendation of pelvic surgery. To subject a patient to surgery who has no other finding than pelvic pain, an unimportant retroverions, or a cystic ovary, is a serious error. There is no substitute for conscientious repeated observation of pelvic complaints on an office basis over an extended period of time. In this way, many supposed surgical problems of the female pelvis undergo physiological adjustment.

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CUFF NOTES

Six Indices on which to judge disabilities:

1. How much does it impair earning capacity.
2. How much does it impair vocational efficiency.
3. How much does it impair employability, that is, the patients chance of getting a new job with this defect.
4. What is the functional (physiological) loss.
5. Is there any cosmetic defect.
6. Do the emotional effects of the accident cause any disability.

Tuberculosis of the Bones and Joints

The clinical picture is never diagnostic. Positive diagnosis is made by identifying the organism. X-Ray films lead to a correct diagnosis but may not be specific.

Types of Medical Testimony

The doctor may testify in any one of three capacities:

1. He may be an ordinary witness to facts.
2. He may testify to medical facts.
3. He may qualify as an expert.

As a fact witness you testify as to what you saw and when you saw it. You may be asked how much your fee was, who paid it, how long the laceration was, how many stitches you inserted. You can be compelled by subpoena to these and you are not entitled to anything above the subpoena fee. On this basis, however, you cannot be asked an opinion, i. e. to the question "What relationship existed between the accident, and the symptoms?" you can answer "Thats a matter of opinion and I am here on a subpoena as a fact witness, not an expert."

Beginning — Twenty Five Ways of Getting Into Trouble in the Care of Fractures

1. Omission of protective splinting in the initial transportation of the injured.
2. Failure to assess the severity of associated shock.
3. Failure to diagnose all concealed non-boney injuries.
4. Failure to diagnose all comcomitant fractures and their complications.
5. Failure to obtain adequate pre-operative X-Rays.

(Continued on Page 173)

The Care of Hand Injuries*

COMMITTEE ON TRAUMA
AMERICAN COLLEGE OF SURGEONS

VI OPEN FRACTURES

I Protection of the Hand (Abstract of Article I)

The first-aid care of wounds of the hand is directed fundamentally at protection. It should provide protection from infection, from added injury, and from future disability and deformity. The best first-aid management consists in the application of a sterile protective dressing, a firm compression bandage and immobilization by splinting in the position of function.[‡] No attempt should be made to examine, cleanse, or treat the wound until operating room facilities are available.

II Requirements of Early Definitive Treatment (Abstract of Article II)

Early definitive care requires thorough evaluation of the injury with respect to its cause, time of occurrence, status as regards infection, nature of first-aid treatment and appraisal of structural damage. For undertaking definitive treatment the conditions required are a well-equipped operating room, good lighting, adequate instruments, sufficient assistance, complete anesthesia, and a bloodless field. Treatment itself consists of aseptic cleansing of the wound, removal of devitalized tissue and foreign material (exercising strict conservation of all viable tissue), complete hemostasis, repair of injured structures, protecting nerves, bones and tendons, and providing maximum skin coverage, and application of firm protective dressing to maintain the optimum position. After-treatment consists of protection, rest and elevation during healing and early restoration of function by directed active motion.

* Note: This is the sixth of a series of articles on "The Care of Hand Injuries." This material is prepared by the American Society for Surgery of the Hand and is distributed by the Committee on Trauma, American College of Surgeons, through its Regional Committees.

‡ Position of function or position of grasp: wrist hyperextended in cock-up position; fingers in mid-flexion and separated; thumb abducted, slightly forward from hand and slightly flexed.

III Surface Injuries (Previously circulated)

IV Lacerated Wounds (Previously circulated)

V Fractures and Dislocations (Previously circulated)

VI Open Fractures

Major wounds of the hand may be caused by crushing or tearing injuries, injuries from explosions, or by the impact of foreign bodies. Such wounds may involve damage to skin by burning or avulsion, laceration of soft tissues, and open injuries of bones or joints. The purposes of early treatment are:

- (1) Relief of pain and shock
- (2) Arrest of hemorrhage
- (3) Protection against infection and further injury
- (4) Removal of foreign bodies and dead tissue
- (5) Conservation and restoration of damaged structures
- (6) Early healing
- (7) Restoration of function

A. First-aid treatment

1. Application of voluminous sterile dressing without interference with the wound, the hand being placed in the position of function.
2. Hemostasis can usually be obtained by pressure gently applied to such a dressing. A tourniquet is rarely needed, but may be employed briefly to check brisk, continuing blood loss.
3. Shock and pain may require appropriate treatment.
4. The hand, in initial dressing applied as above, is splinted in position of function for transportation to adequate surgical facilities. (See Article II)

B. Definitive treatment

1. If bones or joints are thought to be involved, preliminary x-ray views are made without disturbing the initial dressing.
2. Patient is treated systemically for pain, shock and hemorrhage; antibiotics and tetanus antitoxin (or toxoid booster) are

administered, and the patient prepared for operation.

3. In operating room, with patient anesthetized, dressing is removed.
4. With the wound carefully protected, the arm, forearm, and hand are scrubbed, shaved and draped.
5. The skin wound and the area about it are carefully and gently cleansed with soap and water or mild detergent (no antiseptics) and the entire wound examined. Bleeding vessels are ligated.
6. Foreign material and devitalized tissue are accurately trimmed away.

This procedure aims at thoroughness, but must strictly conserve the maximum of viable tissue. It is particularly important to preserve skin and all bone fragments which are not completely free and displaced.

7. Repair of soft tissue injuries is governed by criteria of length of time since injury and of the degree and nature of contamination. (See Article IV) Where conditions are favorable (i.e., in relatively clean wounds not more than three or four hours old), initial repair may be effected within limitations described in Article IV.

Even in unfavorable cases, severed nerves should be united if possible, or at least identified by long sutures of stainless steel.

8. Dislocations of joints, if open in the wound, are reduced.
9. Bone fragments in the open wound are restored as nearly as possible to normal position, but without fixation by foreign material. In some instances the employment of stabilization with a minimum of stainless steel wire is justifiable if required to maintain reduction.
10. Maintenance of reduction of open fractures may usually be obtained by skeletal traction or appropriate splinting. (See Article V) If required, pins for bone fragment fixation or skeletal traction are applied as there described.
11. Maximum skin closure is effected. (See Article IV) Particular care is taken to cover bones, joints, tendons and nerves. Where required, pedicle skin grafts (local or from abdominal wall) may be

used for coverage unless established or inevitable infection forbids.

12. Pressure dressing is applied and the hand splinted as required for optimum control of its repaired injuries, approximating as closely as possible the position. (See Articles IV and V) Flat splinting is to be avoided. Uninjured parts of the hand should be left free for movement. The hand is kept elevated.

C. Subsequent dressings

These are managed with regard to the following factors named in the order of their importance: (a) Control of infection, adequate drainage; (b) Establishment of bony union and joint healing; (c) Early completion of skin coverage and healing.

1. The establishment of infection in the wound may require early and frequent dressings to insure its control. These should be done under aseptic conditions and in such manner as not to disturb the corrected position of injured bones or joints.
2. Large skin defects should be covered by grafting at the earliest moment compatible with the maintenance of position of corrected bone and joint injuries. (See Article III)

D. Restoration of function

Following healing of skin and soft tissues and firm union of bony structures, as much function as possible should be restored by directed active use of the hand, therapeutic exercises and occupational therapy.

Reconstructive surgery is often required after such injuries to permit maximum restoration of function. Such reconstruction will be less extensive and less formidable if the early management of the injury is judiciously and carefully carried out.

CUFF NOTES

(Continued from Page 171)

Fractures of the Upper End of the Radius and Ulna

Monteggia Fractures — fractures of the upper end of the ulna with dislocation of the head of the radius, is one of the most disastrous fractures about the elbow so far as impairment of function is concerned.

Satisfactory reduction of the ulna fracture and replacement of the head of the radius by

(Continued on Page 178)

Doctor, Your Special Interests Are Showing*

John C. Foster, Executive Secretary, S. Dak. State Medical Association

On Labor Day, President Truman castigated the "special interests," who by the use of slogans and "scare-words" were trying to sabotage his Fair Deal Program. He included the medical profession in a sweeping denunciation of those who devised the words "welfare state," and hung it on his proposals of greater social security for all and compulsory health insurance.

What Mr. Truman meant by "special interests," has me momentarily puzzled. In sifting out various groups that might be known as "special interests," I started to make a list. The list read something like this:

- Medical profession.
- Business and professional women.
- Labor.
- Veterans.
- Farmers.
- Small Business Man.
- Life Insurance Groups.
- Lawyers.
- Dentists.
- Optometrist.
- Osteopaths.
- Chiropractors.
- Chambers of Commerce.
- Printing Companies.
- Manufacturers.
- Teachers.
- The indigent.
- The aged.

And here I stopped. I have included enough to indicate that the "special interest" minorities actually form what we know as the public.

In his talk, Mr. Truman indicated that his full program should go into effect, because a majority of the public elected him to do that particular job, based on his campaign promises.

One wonders if he considers the fact that the "mandate" of the people was made up of "special interest" minorities. Labor voted for repeal of the Taft-Hartley Act, not for the

entire so-called "Fair Deal." Farmers voted for full parity, not for the entire Fair-Deal program. Other "special interests" did the same, and the "Fair Deal" was swept into office. Truly, this was election by a majority of the minorities. Mr. Truman is not interested in the other minorities who did not support him. It is evident that he wants the opposition to roll over and play dead. This is the easy way to bring about the welfare state.

There are no valid reasons to believe that the "welfare state" is a bugaboo dreamed up by highly-paid public relations counsels and executive secretaries. The "welfare state" and its number one program — compulsory health insurance — are the concern of everyone. No accusation of being a special interest will deter us from our program of informing the public on this question. I represent a "special interest," and by now you realize that I am only too happy to admit it. After all, the only man who doesn't belong to "special interest groups" is in the cemetery.

The Medical Association oppose Compulsory Health Insurance. As a "special interest" it could be presumed that we fear a loss of income. Past history shows that the plans that have been introduced tend to increase the doctor's income from the start. No — we don't oppose the plan from a standpoint of income. The analysis to follow will point to reasons for our opposition. We must remember, too, that to show faults in a proposal is no proof that the situation is under control. Our answer to meeting the cost of medical care is an integral part of our position in this controversy.

Before I mention what it is, "Compulsory Health Insurance," too many times, it may be well to explain just what it is, and where it came from. The President and Mr. Oscar Ewing, head of the Federal Security Administration, have asked us to believe that the agitation for the program comes from the grass roots; yet the plans, bills, and propaganda, have all come from the Security Ad-

* Presented to the Business and Professional Women's Club, Rapid City, S. D., September 13, 1949.

ministration itself, paid for by your tax money.

The plan that the propaganda asks you to adopt, or should I say, "stomach," basically is government owned and operated insurance. All employed persons will contribute a certain percentage of his or her income to provide medical, surgical, dental, and hospital care, at no further cost to the insured. When a person became ill, he, or the survivors, would fill out some papers, and the doctor or dentist, or hospital, would be paid from federal funds. But it isn't that simple — that is what the propaganda says it will do. But let's look at the bills that have been introduced, and the report that Mr. Ewing wrote for the President last year. How would it work? For the first three years, everyone would kick in one per cent of his income, up to a certain limit, and the employer would match it. For this one per cent, the public would receive only such services as the fund could afford, the main bulk of income to be used for "tooling up" and administration.

After the third year all services would be provided **up to the capacity of current funds to maintain it.** This means that if the fund was not adequate the first result would be a curtailment of services. Naturally, the public would object to such curtailment, and the obvious alternative would have to be an increase in the deduction from income to support the program.

Nor are statements of financial difficulties mere predictions. We have seen forms of socialized medicine in many places. The Germans were first in modern times to adopt such a scheme. This was during the regime of Bismarck. This plan was fraught with graft, and gave rise to inferior medical practice. France adopted the plan, and figuring to do anything better than their perennial enemies to the East, devised safeguards and checks and balances that would protect the public against unscrupulous doctors, and even more unscrupulous patients. This program demanded a top-heavy administrative set-up, which promptly milked the funds dry. Watchers were hired to check chiseling by the doctors and soon became party to the graft in order to implement their own incomes. Soon they needed watchers to watch the watchers, and now about 80 cents of each

medical care dollar in France goes to administrative costs, the rest to actual care.

In England, the British Socialists set up a plan of compulsory health insurance, and arguments still fly hot and heavy as to its national benefit. One fact is known. The plan is three times as expensive as expected — and — if top heavy administrative costs were not contributing to the potential bankruptcy of Britain, there might have been no need for the money talks just completed.

I noticed in Sunday's papers that in England 9,000 wigs had been given out to bald-headed Britishers under the Health plan, the most expensive being \$65.00. Elementary mathematics will tell you the cost of one item that we don't even consider a medical problem except in rare cases. England's eyeglass manufacturers cannot produce one third of the glasses demanded by the British public. I use the word "demanded," rather than "needed," because all evidence points to this being the case. People who contribute a certain amount of their income annually in a program, and don't become ill, are sure to want something for their money. Thus, they take the one thing that is expensive, but won't hurt them in any way.

You can see the patient going into his doctor, and saying, "Doctor, I want some glasses."

The Doctor examines him, and informs him that his vision is 20/20, that he doesn't need glasses.

"But Doc," comes the reply, "You don't understand. I don't care whether I need glasses or not, I am entitled to them."

So the Doctor prescribes window glass in snappy frames, and everyone is happy. Well — at least the patient is happy, because he got his glasses. The Doctor is happy, he got paid, but Mr. Bevan, who nurses this plan along, is not happy. He sees his funds one step nearer depletion.

Shall we bring an example nearer home? We've seen socialized medicine in the United States. One small example was in San Francisco. There, the powers that be decided that all city employees would be compelled to contribute to a fund which would provide medical, hospital, and surgical care. A deduction was decided upon, and an agreement made with most of the City's doctors to provide services at a figure somewhat below average charges. The doctors did this to as-

sure the public that they were willing to co-operate.

Immediately the flood of ills, and imagined ills, started to pour in. Dollar after dollar flowed out of the fund, and the balance dropped dangerously low. More work days were lost than before, because everyone could afford to take off to see his doctor, whether or not it was necessary. When the fund was suffering, the administration asked the doctors to cut down on diagnostic aids, and hospitalization, and the patient to cut down on visits to the doctor. Of course, the employees paid no attention to the administration's request, and the doctors refused to compromise their profession, and the scientific practice of it. To the modern doctor, medicine depends on its diagnostic aids, the age of "guess and by-gosh," being now long past.

Then the administration ordered the doctors to cut down on the number of X-rays and laboratory procedures. The medical men demurred, and an all-out disagreement began. Desperate to keep the plan working, the administration made a rule that no one could be hospitalized without prior permission of the administrator. This was the straw that broke the camel's back. The doctor's hands tied by administrative decrees, pulled out of the program. They treated city patients as private patients, and there the program stands. This is another illustration of the unworkability of the government in medicine.

But we can bring it even closer home for another example. During the depression some bright-eyed boys from the Farm Security Administration devised a plan of socialized medicine for farmers who were indebted to the F.S.A. A corporation was formed by employees of the F.S.A., which was known as the Farmers Aid Corporation. This group proposed to guarantee availability of medical care for a small annual fee from mortgaged farmers. If they were unable to pay the fee, it was advanced to them. Doctors, hospitals, druggists, and nurses were contacted and agreed to give their services at a cut rate. The corporation did not plan to pay for services, but would make them available. They attempted to pay the cut rates and were later to collect from the individual using the service.

Immediately, the corporation could not meet even the low cost medical care, so they

decided to pro-rate to the participants. The initial pro-rata plan did not pay its own way, so they finally agreed to pay 20%. The plan finally went bankrupt, and last year I had the somewhat dubious pleasure of sitting in a courtroom in Huron and picking up the remaining assets for our South Dakota doctors. The amount, \$2,400.00 of an estimated \$180,000.00. That, ladies, is socialized medicine, South Dakota style.

Last week in Deadwood, I met a gentleman who had been one of the incorporators of Farmers Aid. His opinions of the workability of government health insurance are strong and sincere. He had his craw filled long ago, and will have nothing further to do with it.

Little wonder, too, that our South Dakota doctors oppose any such scheme, probably with greater zeal than in other locations.

The Federal Government must be in the business of supplying medical care to a large segment of its population, by virtue of its veterans program, Indian program, and others. An investigation of one of these will give you an idea of how administrative costs ante the cost of care for the taxpayer. In the V. A. medical care is good. Yet, doctors practicing under it are bound by so many regulations that frequently they find it impossible to prescribe the same drugs they would in private practice.

An analysis of administrative costs establishes about 50% for that, and the balance for actual care. We are proud of our magnificent V. A. hospitals, yet if they cared for only service-connected disabilities and emergencies, they would be more than half empty. We must state here that the overbuilding of V. A. hospitals has been partially the fault of "welfare-state" minded veteran organizations.

That same money could have been poured into a hospital building program for the public where actually needed.

FALLACIES USED IN SUPPORT OF COMPULSORY HEALTH INSURANCE

In promoting compulsory health insurance, government employees have been guilty of spending prodigious sums of tax money to foist several fallacies concerning health on the public.

(1) Mr. Ewing has often stated that there are 325,000 needless deaths each year. These he evidently lays at the door of the medical

profession. However, when we analyze the facts we find that he has included in his total 40,000 deaths from accidents. Even the doctors haven't been trained to prevent auto accidents, household falls, and the like.

He lists 115,000 deaths from cancer, and heart disease, but doesn't explain that life expectancy in the last half century has been increased nearly thirty years. As life expectancy increases, the incidence of heart disease and cancer increase, because they are by and large, diseases of advanced age.

Mr. Ewing also includes 120,000 deaths from contagious diseases, but doesn't continue and state that we have the lowest rate of death from communicable diseases of any major nation. Certainly we wish to improve on our own record, but the medical profession should not be blasphemed maintaining the present standards.

Mr. Ewing then concludes with 50,000 needless deaths from childbirth and other causes. The basic question that Mr. Ewing and Mr. Truman have never answered is, "How can a scheme of government operated pauperism improve the statistics. The people are being cruelly deceived if that question cannot be answered, and so far no one of the "cradle to grave" planners has had the intestinal fortitude to come up with one.

(2) Another fallacious argument used by Mr. Ewing and cohorts, is the draft rejection report. Misleading statistics were used, the implication being that things would have been better of we had had compulsory health insurance before the war, so the medical profession is blamed for millions of rejections due to amputations, mental deficiency, illiteracy, venereal disease, defective vision, color blindness, and others. It is beyond my limited powers to be deceived into my believing that a man who had a masterpiece of surgery done on what was once a hand, after it became entangled in a corn picker, did not receive adequate medical care. Yet he was rejected from service with the Armed Forces.

Dr. Leonard Rowntree, former medical director of Selective Service, estimates that only about 6% of the rejectees could have been made available for drafting if they had received medical care. We have no way of knowing whether or not this 6% **wanted** medical care. I can find a dozen men on the streets of Rapid City this minute who could

be cured of the hernias they now have, **if they chose to!**

(3) The third great fallacy we have heard over and over again is that in the Scandinavian countries, where they have Government medicine, the maternal death rate is lower than that in the United States. And so it is. But the comparison is not accurate. They are comparing countries of pure white Nordics with the heterogenous population of the United States. Let us compare the same Scandinavian rates with those of North and South Dakota and Minnesota, where the population is largely Scandinavian. We have a much better record than they will ever have. It is a proven fact that Norwegians are healthier in South Dakota than in Norway.

WE DON'T WANT COMPULSORY HEALTH INSURANCE

We oppose the compulsory health insurance because it will become an increasingly larger burden on the taxpayer and he will receive inferior medical care.

In England many doctors see eighty patients in four hours, one every three minutes. If any of you have gone to your doctor recently and only received three minutes of his time, I'll wager you won't go back to him. But remember, under compulsory plans you invariably end up going back to him.

Not only will the doctors have less time for you individually because of the neurotics and malingerers, but the facilities will also be limited. If people who ordinarily would not purchase hospital space to take a rest have the right to go there, our already overloaded hospitals will not be able to serve those acutely ill.

It might be well to point out, too, that your health record becomes a public record under such a plan. The things you now tell your doctor in confidence will be placed on a record sheet so the doctor may receive his pay. Of course, not everyone will have access to your record, but the gigantic administrative staff made up of many of your neighbors' High School graduates. It's not a pleasant thought to know that these youngsters will be reading and perhaps exclaiming over your record.

The overall plan would introduce further controls into every home. The American citizen is a peculiar critter who cherishes certain liberties that natives of no other

nation have. He is willing to sublimate a number of these liberties to wartime controls, but the war is over. Mr. Average American wants to keep the heavy authoritarian foot out of his front door. Compulsory Health Insurance puts it right smack in the center of his living room. Every citizen will be subject to investigators trying to "get something" on the doctor or the patient. From this one prime step in socialization the do-gooders and know-nothings will insist upon socialization of other businesses, professions, and industries.

Sure, the planners contend it will just be insurance, but history conclusively proves that when a government spends your money, it must place controls upon it. When those controls are invoked, you have a standard brand of medicine decreed by governmental edict.

OUR SOLUTION TO A PROBLEM

I stated earlier that all the negative arguments didn't mean a thing unless we had some solution to offer to the problem. But what is the problem. Are we short of health services. I have already illustrated that the health of the nation is not as bad as the word-coiners in Washington would have you believe, yet we do have work to do.

In certain areas we are short of doctors, not in Rapid City, or Sioux Falls, or Aberdeen, but in the smaller towns and rural areas. Compulsory health insurance will not remedy this situation. We now have our largest medical classes graduating after a war time low, so the shortages will gradually take care of themselves.

We need more nurses — a profession which must be made more attractive to our High School graduates. Compulsory health insurance is not the attraction.

We need more general hospital beds, and the Federal Government can help here by providing funds to communities as under the present Hill-Burton Act.

The Federal Government has a place in providing funds for research, if such funds can be administered without the usual strings.

It also has a place in preventative medicine with its U. S. Public Health Service, which is now doing only a half-hearted job under the direction of Mr. Oscar Ewing. Before the social security people advocate taking over more health functions, they should look into

the nation's record of sanitation, with which they are already charged.

To the indigent, medical care costs are no problem. State, county, and city funds are already available. Perhaps some Federal funds should be added.

The wealthy have no problem to pay for medical care. The only segment of the population who might worry is the great middle class. The employed and the self-employed, to them, we recommend voluntary health insurance, whether it be Blue Cross, Blue Shield, the South Dakota Injury-Illness Expense Plan, or any other of the hundreds on the market is immaterial. All of the competing groups tend to increase benefits or lower premiums to make you a buyer, and here we have the grand American way of doing business — by choice rather than by compulsion.

Yes, Mr. President, we represent a special Interest, an interest in the welfare of the Doctor's patient, and it's very special we assure you. Your scare-words don't scare the people who wish to live in the United States — not in your Welfare State!

CUFF NOTES

(Continued from Page 173)

manipulation occurs in very few cases, open reduction with internal fixation is demanded from the start. The fracture should be exposed and accurately reduced and plated. If the head of the radius fails to reduce it should be manipulated as nearly as possible into its place. It should not be exposed and open repair of the orbicular ligament should not be attempted. To do so invariably leads to ossification around the head of the radius. Allow the head of the radius to remain as is for 2 or 3 months, then either resect the head of the radius or repair the orbicular ligament. Late resection of the head of the radius probably gives the best result. Frank D. Dickson, S. G. and O. Jan. 1949.

Edited by Don Manning, M.D.
Sioux Falls, S. D.

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PRESIDENT'S PAGE

JUNE 1950

The 69th Annual session is now history. It was a very successful year in every respect and reflects perfectly the fact that you selected last year a very excellent president and he in turn had the full cooperation and support of every sub-officer and councillor of the State Association. For this, I am very grateful, because by having had so fine a year just preceeding my term, it will make the machinery of the organization run more easily and without much direction from me, as your new president.

In bringing a balance of the pleasure of being president against the disadvantages I am not certain that it is entirely unmixed blessing. No physician who is interested in the administration end of medicine can fail to feel a great deal of personal gratification when he is elevated to the Presidency of our Association. It ordinarily means that he has been serving his Fellow Doctors of the State well and unselfishly, and that the Doctors of the State have appreciated tha service to the extent of electing him their President. I hope that is the reason that I have been chosen to lead you this coming year.

The debit side of this ledger has more items on it. There is first and foremost the realization that one's years of active service is drawing to a close. After his term he serves as Councillor at Large for a year and then he is out of active harness. For one who has enjoyed the feeling of being on the inside of things for a long time, there is a definite element of sadness connected with this. It should not, however, excuse any past-president for retiring into a shell of indifference as to Medical Affairs and refusal to participate in matters for the good of the Practice of Medicine in the State. The Officers of the Association should in fact become a chain into which links are formed and fashioned by the older and more experienced Members of the Administration until they are fitted to serve as weight bearing parts of that chain, and then used effectively as parts of the chain until breakage or accident shall have rendered them unsuitable for further use to the active benefit of the whole, and then retired to a place of some veneration where they can be held up as examples of integrity and service for the younger men, coming up, to emulate, or where frailties that may have been present in a particular link, will be well concealed by the overall coverage of the others:

The success and value of any association is of value to its members only as the entire membership supports the Association. This embraces active physical support of attendance at your local meetings and general activity in the various Districts, and your financial support by promptly paying your dues so that the necessary activity of the State Administration can progress without curtailment. No one ever criticised the old set-up of the State Association as a valueless and meaningless organization more than I did, and it was justified; but it was due to the fact that we did not have the finances to be otherwise. Now that we do have an efficient and functioning administration that is making a definite helpful contribution to Medicine in this State, it needs every physician's dues on time, and without argument. Our Association has grown into a definite force in this State and in our North Central Area. Much has been done in the past few years of which we can be very proud, and there is much more that can be done if we have the finances to continue to progress in our present course.

For myself, I plead for your very active support, help and forbearance. I shall try to follow the lead of my very capable and efficient predecessors. If ever there are any improvements made or inaugurated during my term of office, it will have been due entirely of those men that came before me and good luck for me. I shall try to keep the wheels turning as they have been going and hope for success.

This page itself is the fruition of an idea that has been growing for some time. It just happens that I have the opportunity of being the first to use it. I hope that this will be a medium of maintaining the close relations between the administration and the membership of our State Association.

EDITORIAL PAGE

PARATHION POISONING

Physicians are warned to be on the alert for symptoms of poisoning which may result from the use of Parathion, "TEPP," and other organic phosphate insecticides applied by spraying on crops for the control of aphids (green bugs). While these preparations are very effective in aphid control, they are highly dangerous poisons and they may be used by individuals who are not familiar with the danger and the precautions which should be taken in their use.

Parathion and related products are extremely toxic if inhaled, swallowed, or absorbed through the skin. They act by inactivating the cholinesterase enzymes of the body and the resulting symptoms are those of marked parasympathetic stimulation. Excessive perspiration, constriction of the pupils, lachrymation, salivation, headache, nausea, and respiratory difficulty are usually present in a degree proportionate to the amount of the chemical absorbed.

Atropine is effective in treatment of parathion poisoning but must be used in dosage far exceeding that usually employed. It is recommended that 1/60 to 1/30 gr. (1 or 2 mg.) be given every hour up to ten doses per day if necessary to control the respiratory symptoms and to keep the patient fully atropinized as indicated by dilation of the pupils. Morphine or sedative drugs are contraindicated and should never be given.

The acute emergency lasts for 24 to 48 hours and the patient must be closely watched during that interval. Raising of the foot of the bed may assist in the elimination of pulmonary secretions. Marked muscular weakness may make artificial respiration necessary and it may be necessary to insert a tracheal tube, to remove bronchial secretions by means of a catheter, and to empty a distended stomach by means of a Levine tube. Administration of oxygen is of value if the airway has been properly cleared. With proper treatment, complete recovery may be expected

even in cases requiring many hours of artificial respiration.

It is highly desirable that an individual using parathion keep a small supply of atropine on hand to be used in an emergency when symptoms of poisoning occur and that he be warned to immediately seek medical advice in such an emergency.

GULLIBLES' TRAVELS

April 25 — Received an unexpected call from **Mrs. Doering** of the Sioux Falls History Club asking me to speak to the group to fill in for a panel group from Brookings that had met snow on the way down. Talked to a small but enthusiastic audience.

April 26 — Spent a good portion of the evening with **Dr. Ed Greenough** developing a paper which appeared in last month's journal.

April 27 — Spoke to the Junior Chamber of Commerce in Sioux Falls on the A.M.A.'s stand on the medical side of the Hoover Commission report.

April 28 — Spent the morning at the Veteran's Administration in a conference on the Home Town Care Plan. **Dr. Fitzsimmons** represented the area office of the V. A. from Minneapolis, while others attending were local officials; **Paul Dickensheets, Dr. R. D. Green, Dr. R. A. Culbertson, and V. H. Vander Schoor.**

May 3 — Attended a meeting of Governor Mickelson's committee planning to disseminate information on care of atomic radiation injuries to the profession. **Drs. G. J. VanHeuvelen and Donald Slaughter** were the rest of the Committee.

May 4 — **Dr. Slaughter** dropped me in Huron on the return trip from Pierre where I was able to tie up a few loose ends of the Annual Meeting. My wife joined me late in the afternoon and we attended a very fine meeting of the Huron District Society at the Country Club. All the wives attended and plans for the big affair were discussed.

May 6 — Appeared on Radio Station KELO in Sioux Falls to discuss compulsory health insurance with **Prof. Bruce Cole**, chairman of the Minnehaha County Young Democrats. Fifteen minutes is much to short to even get into the subject.

May 12 — Attended the Pierre District Medical Society meeting with Association president, **Dr. Wm. Saxton** and heard **Dr. Ralph Ferguson** discuss lymph nodes. Drove back to Huron that night and then took a busman's holiday by winning the State Junior Chamber of Commerce "Speak Up for Democracy" contest.

The rest of this week is taken up with preparations for the Annual Meeting.

May 17—Appeared before the Presbyterian Men's Council in Sioux Falls to discuss hospitals and homes for the aged. **Ray Hamilton** from KIHO made the arrangements and the introduction.

May 19 — Drove to Huron to start the wheels turning for the Annual Meeting and found that the City of Huron is used to making the wheels turn. My hat is off to all the fine people of Huron who made my life so uncomplicated during the session. Special bouquets to **Miss Anderson** and **Miss Sundstrom** for their excellent assistance.

BOOK REVIEW

YOU AND YOUR HEALTH, by J. Roswell Gallagher, M.D., School Physician, Phillips Academy, Andover, Mass.

This booklet is another in the Life Adjust-

ment Series which now total 23, each treating a question of interest to teen-agers, parents, and those working with adolescents. The booklet consists of 48 pages written in simple, concise terms and discusses adolescent growth and development, diet, physical fitness and modern ways of protecting health.

It is an excellent booklet for teachers, parents and pupils alike.

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JUNE
1950
Vol. 3 No. 6

YOUR MEDICAL ASSOCIATION

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

REPRESENTING THE WORLD MEDICAL ASSOCIATION

Representing more than 500,000 physicians of forty nations, the World Medical Association on April 29th adopted a resolution formally condemning euthanasia, at the recent session of its legislative Council in Copenhagen, Denmark.

The Council also passed another resolution which called for the bulk of the world's medical practitioners to mobilize against all factors jeopardizing their professional freedom. The first of the six points prompting this second resolution cited both the present Russian Government and the pre-war Government of Germany as having controlled "judgment on genetics, heredity, and anthropology in order to make them serve political ends."

The practice of euthanasia was denounced as being contrary to the Association's formal declaration and code at Geneva a few years ago. These stipulate that "A doctor must always bear in mind the importance of preserving human life from the time of conception until death."

After arriving in New York City from Copenhagen, Dr.

Louis H. Bauer, Secretary General of the Association, explained that the resolution for the safeguarding of professional freedom was prompted in particular by news reports several months ago concerning Professor T. D. Lysemko, Russia's foremost geneticist. In these he was described as having truckled to propaganda demands of Communism by promulgating a doctrine concerned with heredity and environment which was squarely in conflict with scientific consensus.

MEDICAL BOOKS MOST IN DEMAND THROUGH CARE-UNESCO PROGRAM

Medical books are in greater demand than any of the 12 categories available through the CARE-UNESCO Book Fund Program, which provides for the sending of new texts, research, and reference works for libraries, universities, and hospitals in Europe and Asia.

This demand is shown in a tally of priority lists submitted by 500 institutions in the countries participating, according to the Book Fund department at CARE headquarters, 20 Broad St., New York City. The plan has been

endorsed by the American Medical Association.

Some of the institutions requested specific subjects from among the 30 medical sub-categories covered. However, many simply stated "all" or "any"—a fact further indicative of the widespread need for up-to-date medical information overseas.

In line with the requests, medical volumes (the bulk of them American works) have been included for almost every institution reached in CARE's initial deliveries of Approximately \$50,000 worth of books.

The grateful reception those gifts received were typified by Dr. Olav Torgersen, head of the Department of Pathology at the University of Oslo, where CARE recently delivered \$1,000 worth of medical and other scientific books as the gift of American donors, among them the Richland County Medical Society, of Mansfield, Ohio.

"I think most European doctors would admit America has achieved the leadership in world medicine and that a close contact with American medicine is essential in the modern treatment of sick people," Dr. Torgersen de-

clared. "Since all research work, to a greater or lesser degree, is based on the result of other research carried out all over the world, medical literature is a very important link."

The book need at the Norwegian university grew out of the same misfortunes suffered by almost every educational and medical institution overseas in the past decade. First, wartime confiscations and bombings destroyed millions of books. Then, there was the blackout on research during the war years, when no new books were received. And now the lack of dollars makes it impossible to buy the new books so easily available in this country, where scientific research was able to continue uninterrupted throughout the war.

In adding the Book Fund, in cooperation with UNESCO, CARE has applied the same principle that makes its food and textile package service so convenient: Donors just send the money. CARE does the rest.

Lists of book needs from institutions overseas are obtained by CARE and UNESCO representatives. With the funds available, CARE then fills those needs as closely as possible by buying the latest and best English-language books.

CARE's purchases are based on a 1600-title bibliography compiled by a Book Committee whose members include Dr. John F. Fulton, Sterling Professor at Yale Medical School. The medical subdivisions are: anatomy, anesthesia, bacteriology, biochemistry, cardiology, derma-

tology, and syphilology, diagnosis, dietetics, endocrinology, history of medicine, infectious diseases, internal medicine, neurology, obstetrics and gynecology, ophthalmology, orthopedic surgery, otorhinolaryngology, pathology, pediatrics, pharmacology, physical medicine, physiology, proctology, psychiatry, radiology, surgery, tuberculosis, urology, medical dictionaries and yearbooks.

Through special publishers' discounts and ECA ocean-freight subsidies, all CARE's costs of purchase and delivery are covered at the publishers' list prices. Countries now reached are Austria, Belgium, Czechoslovakia, Finland, France, Great Britain, Western Germany and Berlin, Greece, Italy, Norway, the Netherlands, Malta, Japan, Korea, the Philippines, Pakistan and Siam.

No used books are accepted for the plan. Contributions in any amount can be sent to the CARE Book Fund Program, 20 Broad St., New York 5, N. Y., or any local CARE office. Donations under \$10 are pooled in a general fund. But donors of \$10 or more can specify the type of book, country and institution (though CARE hopes the majority of recipients will be undesignated, so that the needs can best be met). Delivery is made in the donor's name and CARE returns a signed receipt. Also, on request, the name of the contributing individual or organization is inscribed on the CARE-UNESCO book plate in each volume.

For professional men interested in world peace who realize that American medical knowledge must be shared with all geographic areas to bridge the terrific gap between knowledge and practice, this program, through CARE, provides a simple, inexpensive yet effective method.

GRASS ROOTS CONFERENCE

The Seventh National Conference of County Medical Society Officers is scheduled for Sunday morning, June 25, at the Palace Hotel, San Francisco, California.

The program will consist of a true and false questionnaire on socialized medicine conducted by **L. Fernald Foster, M.D.**, Secretary, Michigan State Medical Society, Bay City, Michigan, followed by three panel discussions.

The meeting is open to all physicians who are attending the annual session.

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PHARMACEUTICAL DIVISION

BLISS C. WILSON, Editor

RADIOACTIVE ISOTOPES AND THEIR USE IN MEDICINE

Willis P. Blackwell, Assistant Professor of Pharmacy, S. Dak. State College

While my paper is concerned mainly with radioactive isotopes, I should like first to bring in a few points about radiation and atomic energy. What is radiation? A stove radiates heat, an electric bulb radiates heat and light; but these are weak forms of radiation. In atomic energy work we are concerned with high energy radiation. High energy radiation is the same thing as atomic energy, the same thing as radioactivity. High energy radiation comes from the core or the nucleus of the atom.

Atomic energy is not a new thing. Long before man existed, the radiation of cosmic rays — a form of atomic energy — was striking down upon the earth from the skies. Radioactive elements, like radium in the earth itself, gave off radiation, another form of atomic energy. This radiation from the earth and sky still goes on everywhere in the world. It is least at sea level, about one-tenth as strong for instance, as in the Colorado Rocky Mountains where thinner air lets through more cosmic rays, and also radioactive deposits are in the earth.

Atomic energy is not new, but never before have there been so many sources of radiation, nor has it ever been released at so rapid a rate. In the earth, radiation is released slowly by the gradual disintegration of sixteen elements, which, like radium, are normally radioactive. Man has concentrated radium, has created x-ray machines, atom smashing machines and nuclear reactors. In the nearly fifty years that man has known about radium, for example, he has extracted no more than a few pounds in the entire world; but a reactor

generates as much radiation as would several tons of radium.

All material things, the human body, a piece of copper wire, a chair, water — all are composed of certain basic constituents we call elements. Our college chemistry taught us that iodine is an element, copper is an element, water is composed of two elements, oxygen and hydrogen. These elements are in turn composed of very minute particles called atoms. Once it was thought that the atom was the smallest bit of matter, but now we know that the atom itself is made up of an outer shell of electrons which revolve around the nucleus which is made up of protons and neutrons. Now these are held together by a store of energy. When we set this energy free by splitting the atom, or when we loose these particles from their normal orbits, we release high energy radiation.

All high energy radiation has the same effect on living cells and living tissues. Some forms of radiation may cause a greater amount of damage, but the type of injury is the same.

Basically, there are five classes of radiation that are most frequently encountered in biological and medical research:

(1) Alpha Particles — large, highly damaging, positively charged particles. They are unable to penetrate the unbroken skin, but if the element liberating them is deposited in the body they can cause serious damage.

(2) Beta Particles — moderately penetrating, moderately damaging particles; penetrate about one-third of an inch of tissue.

(3) Gamma Rays — highly penetrating — they are less damaging quantity for quantity than the two just mentioned.

(4) Neutrons — uncharged, high speed, highly damaging particles. Depending upon

their speed, they can penetrate several feet of tissue.

(5) X-rays — very similar to gamma rays, but less penetrating.

These kinds of radiation affect all living things in the same way basically; naturally this is true as all living things are formed of much the same material. Carbon, for example is a constituent of all living things. The nucleus of a carbon atom carries six units of positive electricity, whirling about this nucleus are six electrons, each bearing a negative unit of electricity. The combination of these equalizing electrical units, six positive, six negative, make the carbon atom as a whole electrically balanced and neutral. This electrical balance is characteristic of all atoms. The negative charges of the thousands and millions of electrons exactly equal the positive charges in the nuclei of these atoms, so that the molecule as a whole is neutral electrically.

In the rapid and continuous process of life; in the building up and breaking down of tissue; the replacement of nutrients and the removal of wastes; in the production of muscular energy and in the reproduction of the whole organism; these complex molecules break up and combine in a million ways. Yet, they always combine in ways that preserve their electrical balance. To destroy this balance would damage or kill the living material.

This is what radiation does. Radiation attacks, disrupts, and destroys the delicate electro-chemical balance of the atoms, molecules, and protein combinations within the bodies of living things. As a result, it damages and kills the cells and if enough cells are destroyed the whole organism is injured and may die.

We have known about high energy radiation or radioactivity for a long time. Roentgen discovered X-rays in 1895 and the immediate and obvious application in the detection and correction of fractured bones was made rather promptly. In 1902, Cannon used X-ray photographs of barium to picture the stomach and intestines. Still later, x-rays were used in the treatment of tumors and cancerous growths.

About fifty years ago, radium was discovered by Pierre and Madame Curie in France. This led to the wide and valuable use

of radioactivity for the treatment of certain diseases, particularly cancer.

Twenty-five years ago, Hevesy, in Denmark, first used radioactivity to trace the course and behavior of a stable element in a biological system. This was the inception of the technique for tracing the atoms of stable elements by means of their radioactive counterparts — that is, radioactive isotopes. These first studies were done with the naturally occurring radioactive isotopes and were limited to the tracing of the heavy elements, lead and bismuth.

As long as radioactivity was a phenomena found only in the heaviest elements, which have little or no presence in biological material, the use of radioactivity for the purpose of treatment or tracer studies was quite limited in scope. Then the miraculous discovery of Curie and Joliot in 1934, that ordinary elements, which are stable in nature, could be induced to become radioactive. It was soon found that radioactive isotopes could be made of nearly all the elements. This opened a door to a wide variety of possibilities for research and application in biology and medicine.

At first, man made radioisotopes could be made in significant quantities only by the use of very high nuclear bombardment in devices known as the cyclotron or the "Atom smasher." These machines were not only limited in number, but the amounts of radioactive materials produced were not sufficient for wide scale application and were very expensive.

A vastly wider opening of this door into the new world of opportunity in medical research became a possibility with the first successful chain reaction in Uranium; the operation of a "nuclear reactor" or "atomic pile." Actually, nothing was done along this line during the war because of secrecy surrounding the developments. It is only since 1946 that atomic pile produced radioisotopes have been available outside the atomic energy projects.

American scientists have also developed equipment to sort out and concentrate radioactive isotopes; one method is electromagnetic attraction; the other is a gaseous diffusion method by which atoms of a gas diffuse and pass through a wall of tiny capillary holes.

Now to get down to the actual use of radioactive isotopes in medicine. Each person con-

tains billions upon billions of atoms. Each day, billions and billions of atoms in our bodies are replaced by billions and billions of new ones. They are replaced at an amazingly rapid rate — in a years time, practically all the atoms in our bodies are replaced by new ones.

By the use of radioisotopes, we can put a "tag" on the atoms that enter our body, these isotopes are called "tracer" atoms. These atoms can be followed or traced to wherever they are utilized or stored, or excreted from the body. Now the radioisotopes react much the same in our bodies, chemically and physically as do the ordinary atoms. Isotopes are like twins, perhaps; they act and look alike, have the same place in the atomic table, but differ in weight. An example which we have heard about is hydrogen and heavy hydrogen. Heavy hydrogen weighs twice that of ordinary hydrogen. By combining heavy hydrogen with oxygen we get heavy water. This is a stable isotope.

Now we not only have stable isotopes, and there are about 284 stable isotopes of the elements from number 1, which is hydrogen, to number 83, which is bismuth; we have unstable isotopes which are radioactive. All elements below bismuth in the atomic table have naturally occurring radioisotopes. It is the unstable isotope, those that are radioactive, with which we are concerned in medicine.

Radioisotopes can be treated by radiation given off. These radiations are detected by sensitive instruments such as a geiger counter. When radiation enters a geiger counter, it generates an electrical impulse. These impulses can be made to produce signals, which may be seen, heard, or mechanically counted. These instruments sometimes will detect as little as a billion-billionth of an ounce of radioactive material.

This sensitivity allows the isotopes to be used in very dilute amounts, sometimes in a dilution of 1 to 50 million. Therefore, radioactive tracers can be used without any possible chance of radiation damage to the living tissue.

Radioactive isotopes are being used every day in the study and diagnosis of disease. Take for example, anemia. We know in many cases that the correct dosages of liver and iron is the proper treatment for this condition. Occasionally, anemia is due to failure of the

pituitary gland; additional pituitary hormone will remedy this. However, certain types of anemia do not succumb to these treatments. By the use of radioactive iron it was definitely determined that there was no deficiency of this element. Now by feeding the patient a high protein diet, containing radioactive labeled glycine, it was possible to trace blood metabolism from these proteins and to find that they were absolutely essential in the manufacture of blood. By combining a high protein diet with hormone therapy we have a much more effective treatment of this type of anemia.

Radioisotopes are being used to study the loss of mineral salts from the body. Mineral salts are necessary to many body processes and are sometimes lost rapidly after severe injury, surgical operations, or severe general infection. Recently it has been learned that deaths from acute diarrhea in infants are due to a marked fall in the potassium content of the child's body. There is also a material loss of potassium in diabetic acidosis. By the use of radio-potassium the amount of potassium loss can be readily determined.

In the same way, radio-sodium can be used to determine the amount of sodium retained or lost by body cells after surgical operations.

Red blood cells can be taken from the body, labeled with radioactive phosphorous and then reinjected to determine the speed with which the labeled cells mix with the total amount of blood. This mixing time varies with different individuals from five to fifteen minutes. With people suffering from certain heart conditions, the mixing time is much longer.

Radio-sodium is used in diagnosis of circulatory disorders. If isotope labeled salt solution is injected into a normal person, the circulating blood will quickly and evenly distribute the sodium to both legs. We can learn this by moving a geiger counter up and down both legs; if there is absence of radioactivity in any certain area, say in the lower left leg, then we know that there is circulatory impairment or constriction. This method of diagnosis can be used to determine if amputation is necessary, and also at what spot to perform the amputation.

In addition, radio-sodium can be used to determine the pumping qualities of the heart by recording the passage of radioactive blood

through the heart. A radioactive detector is connected to an ink-writer of some type and placed outside the body, but near the heart. As the radioactive blood enters the right side of the heart, the recording pen rises. The pen then seeks the normal level, but as the blood enters the left side of the heart it rises again. The shape of the curves shown by the writing pen indicate the heart action and any irregularity in this curve shows an abnormal heart.

Radio-iodine and radio-phosphorous are both used in locating brain tumors prior to and during brain surgery. A dye called fluorescent, it is used in surgery to locate and mark out the tumor tissue. However, it can be used only after the incision has been made through the skull. Now radioactive iodine has been incorporated into a similar dye, diiodo-fluorescein, which is also absorbed by tumor tissue in the brain. About two to four hours after the dye has been injected into an artery leading to the brain, a careful survey is made of the patient's head with a geiger counter and the surgeon makes his incision at the point of highest radiation reading.

Radio-phosphorous is also used to locate tumors in surgery. A brain tumor, following an intravenous injection of radio-phosphorous will absorb many times as much phosphorous as normal brain tissue — even 100 times as much. The rays emitted by the radio-phosphorous penetrate only about one-fourth inch of tissue so it is necessary to have a very small geiger counter, small enough to be inserted into the brain during surgery. This has been used successfully in at least fourteen operations to remove brain tumors.

Radioactive phosphorous is also used in treating polycythemia and chronic leukemia. Polycythemia is a condition of over-population of red blood cells; leukemia is an over-production of white blood cells. Radiophosphorous is useful in treating these diseases because it is selectively absorbed by bone marrow where the over-production of the blood cells is taking place. Radio-phosphorous can be given by mouth as a sodium phosphate solution. The radiation given off is not penetrating and so is localized to the bone marrow. The radiation inhibits the production of red cells and has no long range damage to the bone structure because it has a half-life period of only fourteen days. Radio-phosphorous has been very successful in this disease but has

been used with only partial success in treatment of leukemia.

Radio-iodine has been used in Grave's Disease (exophthalmic goitre) in which the thyroid gland is over active. There are other means of treatment in such cases including surgery to remove all or a portion of the gland. Radio-iodine is effective because the iodine has an affinity for thyroid tissue and the radioactive isotope deposited in the gland depresses its activity. It is often very useful where surgery has been unsuccessful.

The condition of the thyroid gland can also be diagnosed by the use of radio-iodine. If the gland is over-active, a large amount of thyroxine is produced and accordingly its ability to take up iodine is great; underactivity of the gland produces the opposite effect. These conditions, having different rates of uptake of iodine, can be easily determined by using test doses of radio-iodine which can be administered as sodium iodide, using a geiger counter on the neck to determine the amount of radiation given off, and then making a comparison with a normal individual.

Peculiarly enough, radio-iodine has been used in a very similar way to relieve the pain and distress in two types of heart disease — angina pectoris and congestive heart failure. Previous studies have shown that lessening of thyroid activity would reduce the body demands upon the heart so as to reduce the choking sensation and pain of angina pectoris, and the shortness of breath and dropsy connected with congestive heart failure. Since radio-iodine does slow down the action of the thyroid it can be used in this treatment. Actually this treatment needs further investigation.

In the field of radioactivity more work is being done in the control and treatment of cancer than with any other disease. The Atomic Energy Commission is expanding its part in the nationwide quest for knowledge about cancer and has plans for a fifty bed hospital in Chicago and a 32 bed hospital for clinical research at Oak Ridge.

The Commission supplies radioisotopes to qualified cancer research workers in the United States without production charges. The Commission has also sponsored research and provided radioisotopes to determine the

efficiency of radio-cobalt as a substitute for radium in the treatment of cancer.

The value of radio-cobalt in cancer research and treatment is being determined. In treatment, radio-cobalt is used as a substitute for radium, which we know is one of the established tools for destroying cancer. Now in using radiation for treatment of cancer, it is useful because the cancer cells are much more sensitive to radiation than the ordinary body cells. In treatment, therefore, the radiologists task is to supply the maximum amount of radiation to the cancer area without causing damage to the surrounding tissue.

Difficulties arise in treatment with radium because of the cost and also the fact that radium is contained in non-pliable tubes. Radio-cobalt is relatively cheap to produce and can be used in reasonable quantities. It can be made up in various pliable shapes and with different rates of radioactivity. It can be prefabricated into any shape in the ordinary workshop before it is irradiated. Even after being made radioactive, it can be stored as a spool of fine wire and can be clipped off in the quantities needed. It can be made into various alloys to improve its metallurgical properties.

Radium costs from \$15,000.00 to \$20,000.00 per gram; radio-cobalt can now be had at a minimum charge for handling. However, radium is of permanent value to an institution since it requires fifteen hundred years to lose one-half of its activity. By contrast, radio-cobalt has a half-life of five years, therefore the radioactivity of cobalt must be measured each time before its application.

From another viewpoint, radio-cobalt has a further advantage. Radium is dangerous if released in the body since it remains and continues to destroy tissue for many years; cobalt, on the other hand, is rapidly excreted.

Radioactive iodine is another isotope useful in the treatment of cancer, but only of cancer of the thyroid gland. If the cells of the cancer have still retained their ability to take up iodine, then the radioiodine will be selectively absorbed. This is used both in treatment and in diagnosis. Many times the offshoots (or metastases) are hidden in the lung, brain, or bones and if they take up the radio-iodine they may be located by use of the geiger counter.

Still another valuable isotope is radioactive gold. This is used only for cancers near the surface. Radio-gold is put into a special colloidal form and injected uniformly through the cancer mass so as to bombard all the cancer cells with radiation. Radio-gold does not in this way enter into any of the body processes, but stays localized in the area where injected.

We have noted only some of the more well-known ways in which radio-activity can be used in medicine and research. The future application of radioisotopes as therapeutic agents will depend on getting the isotope to a specific organ or tissue, a goal also sought in diagnostic use.

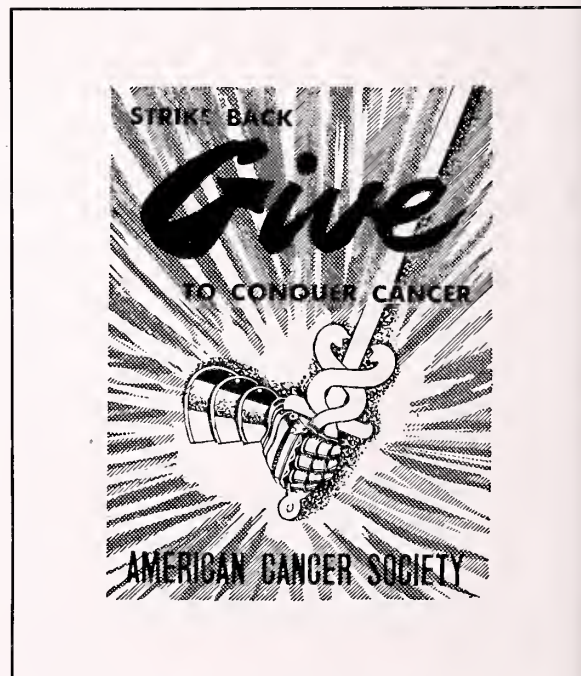
Cancer is the disease which lends itself to isotope treatment, but to date, with exception of thyroid, compounds have not been found for which the cancer cells have a selective appetite. There are thousands of compounds which may be tried so there is the possibility of unexpected success.

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Newer Therapeutic Agents

by Edgar Parry, Instructor in Pharmacy
South Dakota State College

Terramycin-A New Antibiotic

In January of this year, the Chas. Pfizer Company announced the release for general use of their new antibiotic, Terramycin. Results from its use have not yet started to appear in medical writings. The information available is found in the Pfizer Company's report of their clinical trials¹ and the report of the Food and Drug Administration tests.²

Terramycin was isolated from a soil organism, *Streptomyces rimosus*.³ It forms a crystalline amphoteric compound, slightly soluble in water, but forming both the sodium and the hydrochloride salts which are readily soluble. It is stable at room temperatures; capsules which had been stored for twelve months showed no decrease in potency.

Studies of the drug in vitro show it to be active against both gram positive and gram negative organisms, as well as the rickettsias. Comparative in vitro concentrations required to inhibit a typical gram positive organism (*staphylococcus aureus*) was 0.85 micrograms per ml, while the inhibitory concentration for a typical gram negative organism (*E. Coli*) was 7.0 micrograms per ml.¹ Four grams of terramycin daily in divided doses produces a continuous blood concentration up to 12.5 micrograms per ml — a level sufficiently high to control many diseases. The Food and Drug Administration found that two grams per day in divided doses reaches a level of about 7.5 micrograms per ml, but averages about 6.0.

It is relatively non toxic when given orally or by injection. Some patients develop gastro-intestinal disturbances in oral doses as high as four grams per day, but none at the two gram daily level. No damage to kidney or liver have been noted as yet, and no serious allergic reactions have occurred. It appears to be very safe in animals — the LD₅₀ dose for mice is 192 miligrams per kilogram of body weight.³

Clinically, it resembles aureomycin in activity. The Federal Security Agency of the Food and Drug Administration made a study

comparing the anti-bacterial spectra, the serum concentration and urinary excretion of Terramycin and Aureomycin.² They used fifty-four strains of twenty genera of their bacteria and determined the minimum inhibitive concentrations of each drug against each strain, at the end of each of four consecutive days of incubation. At the end of the fourth day the minimum lethal concentration was determined. The effectiveness of terramycin against the different strains paralleled closely that of aureomycin. In most cases the minimum inhibitory concentrations of each increased with each successive day of incubation. Also, the lethal concentration at the end of four days was much higher in most cases for both drugs than the inhibitory concentration. This would show terramycin to be mainly bacteriostatic rather than bacteriocidal. In prolonged incubation tests, the end point at which the antibiotic was no longer bacteriostatic, was reached sooner with aureomycin than with terramycin. This reflects a greater stability for terramycin when in solution.

The Drug Administration tests showed it to be highly effective against the clostridia (botulism, tetanus, etc.) and saprophytic mycobacteria, but ineffective against yeast-like organisms (fungi-caused diseases) and *Proteus vulgaris*. It had a wide range of activity against the other strains tested. Tests made by the Pfizer scientists showed it to be very effective against the pneumonias.¹ All cases of lobar pneumonia tested were afebrile in 24-48 hours. Treatment should be continued up to ten days however, to prevent relapse. In virus pneumonia, the long convalescent period appears to be absent when terramycin is used. It is highly effective against most strains of streptococci, including those causing hemolytic streptococci infections, acute follicular tonsillitis, erysipelas, abscesses due to anaerobic streptococci, and urinary tract infections. Terramycin is also effective against staphylococcus infections of the

blood, conjunctivitis and abscesses caused by staphylococcus. A series of gonorrhea cases have yielded to a single dose of one gram orally.

Other reports of isolated cases have shown it to be definitely beneficial in anthrax, whooping cough, undulant fever, murine and epidemic typhus. In vitro tests show strong possibilities against Rocky Mountain Spotted Fever, Q-Fever, and virus infections such as herpes zoster, granuloma inguinale, and lymphogranuloma venereum.¹

Optimum dosage was studied by the Food and Drug Administration through a comparison of the serum concentration levels following administration of terramycin and aureomycin.² Blood serum concentrations following comparable single doses were approximately the same. Increasing the single dose beyond 1.0 gram did not materially increase blood levels. A difference appeared, however, when divided dosage was used. Divided doses of aureomycin failed to increase blood level concentrations when amounts were increased. In fact 0.25 gram appears to be as effective as 0.75 gram every six hours and almost as effective as 1.0 gram every six hours. With terramycin, an increase from 0.25 gram to 0.75 gram every six hours produced marked progressive increases in blood serum concentrations. There was little difference between 0.75 gram and 1.0 gram. Serum concentrations show optimum dosage to be 3 grams per day in divided doses, or 0.75 gram every six hours.

Terramycin is readily absorbed from the gastro-intestinal tract and appears unchanged in the blood, urine, and feces. Like aureomycin, it affects the intestinal flora causing looseness of stools. With doses of 250 mg, about 35 percent appears in the urine within twenty-four hours, while 10% will be found from a dose of 1.0 gram. In contrast, 10% of 250 mg and 5% of 1.0 gram of aureomycin were obtained from the urine. The increased stability of terramycin can account for some of the difference here, but not all.

In summation, terramycin is an antibiotic of very low toxicity, closely related to aureomycin, and having a wide range of activity. It appears to be more stable than aureomycin, especially in solution, and it is possible to obtain higher blood serum concentrations with terramycin than with aureomycin. Final

evaluation of the drug must be delayed until the results of further clinical trials are available.

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NEWS NOTES

A new drug store is being established at Menno, South Dakota, by **Pharmacist O. F. Carlson** of that city. Mr. Carlson had been retired for some time but now expects to put in full time as manager of the new pharmacy which will be known as "**Backus Drug.**"

Harold R. Newell of Deadwood purchased the Western Rexall Drug and Edward's Drug Store from **Clifford L. Edwards** of Lead. Transfer of ownership became effective April 1st.

The **H. Kress Drug Store** at Mitchell was destroyed by the fire which originated in the Widman Hotel across the street to the south of Kress Drug. The pharmacy and store building are practically a total loss but **Pharmacists H. Kress** and **Wayne C. Shanholtz** report that they plan to reopen as soon as rebuilding can be completed.

Dr. Floyd J. LeBlanc, Dean of the Division of Pharmacy, attended the annual meeting of the American Association of Colleges of Pharmacy at Atlantic City. He also represented the S. D. Ph.A. at the American Pharmaceutical Association convention.

Remember the Pharmaceutical Association Convention will be held in Sioux Falls on June 13, 14, 15, 1950. Arrangements are now practically complete for this big three day convention. There will be plenty of merchandise prizes and the Sioux Falls pharmacists assure you that this will be the biggest and best convention ever held.

Bladder Tumors: Their Diagnosis, Treatment and Prognosis*

James C. Sargent, M.D.
Milwaukee, Wisconsin

It is rare indeed that a person comes to learn that he has a tumor of the urinary bladder except through the advent of a spell of gross, total hematuria. Once in a blue moon a pathologic fracture or some other form of metastatic pathology starts a search for a primary tumor that finally ends in the urinary bladder. Similarly, a very, very few bladder tumors are picked up in the course of a general urologic examination or through the routine of periodic cystoscopy of those who, working long and intimately with the analine dyes, are notoriously prone to develop cancer of the bladder. By and large, however, it is the startling experience of an episode of gross hematuria — sudden to come, completely without other symptoms and soon to go — that tells the story.

When, after months or years of occasional episodes of hematuria, bladder cancer has progressed to the point of deep vesical and perivesical induration with extensive sloughing of the tumor mass, other symptoms develop which must be recounted if only as a matter of academic interest. Little of clinical usefulness can be attached to these late symptoms, however, since any diagnosis that awaits their confirmation can hardly be of practical value to the patient. If cancer of the bladder is to be prevented or cured, the presence of tumor must be recognized long before these distressing terminal symptoms have developed.

When bladder cancer has developed to the point of frank sloughing, heavy infection of the bladder cavity inevitably follows. Hematuria, either gross or microscopic, becomes constant and painful and frequent urination become distressing — often distracting. If massive malignant infiltration surrounds and strangles either of the two ureteral orifices, renal pain and sepsis develop announcing

pyonephrotic destruction of the kidney. And if the internal urethral orifice be caught in the mass of malignant induration, difficulty of urination develops and bilateral pyonephrosis soon adds failing renal function to the clinical picture. Indeed, it is the urasepsis resulting from renal damage of this sort that ultimately leads to death in most cases of bladder cancer. In rare cases a cancer of the bladder dome will attach itself to and invade a loop of gut, producing intestinal symptoms and leading finally to an enterovesical fistula. When one with longstanding hematuria begins voiding gas and foecal matter, one need hardly cystoscope a patient to know what has occurred. Similarly, when a woman becomes incontinent after months or years of hematuria, one hardly need examine her to know she has a cancerous vesico-vaginal fistula. And finally the symptoms of generalized malignancy are too familiar to need relating.

Time was when it was quite proper to look upon a few days of simple hematuria something as a nosebleed. Some doctors still do but their ranks are thinning and their days are numbered. Fortunately, through just such meetings as this the word is getting around — both in and out of the profession — that when anyone bleeds from any of the body orifices, both he and his physician had better find the reason why. Coughing blood, vomiting blood, urinating blood, bleeding from the bowel and any unnatural bleeding from the vagina all mean business. And often enough to make careful investigation mandatory, such bleedings mean cancer.

There are two points in connection with hematuria that need emphasis as you look at Fig. #1. It has been drawn to portray the significance of total gross hematuria; not microscopic hematuria and not terminal urethral bleeding. Were a similar diagram drawn to portray the circumstances under which microscopic red cells are found in the urine, nephritis would occupy nearly the en-

*Read before the Annual Meeting of the South Dakota State Medical Society, Huron, South Dakota — May 22-23, 1950.

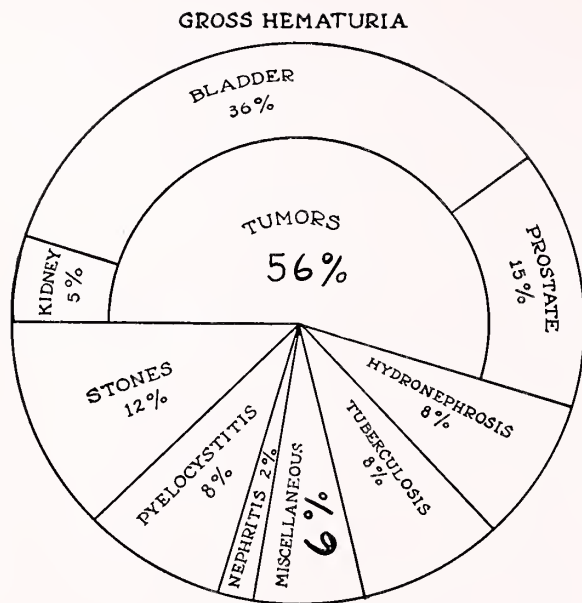


Fig. 1

tire circle. And if we were to portray the significance of terminal bleeding — bleeding from the urethra after the bladder has emptied itself of its normally clear urine and is down to squirting out the last few drops — the entire circle would be occupied almost completely by simple congestion of the mucosa of the bladder neck. But when a person voids a urine grossly bloody from start to finish, it means that something somewhere above the bladder neck is bleeding actively. Then, as may be seen from the diagram, the chances are better than even that the patient has a tumor and the chances are better than one to two that he has a tumor of the bladder.

Once hematuria has occurred and its warning is heeded, the recognition of a bladder tumor is quite easy and direct. Cystoscopy simply must be done. And I would stress the importance of doing cystoscopy at once — while the patient still is bleeding. There is no particular advantage to immediate cystoscopy if the patient proves to have a bladder tumor since a tumor sitting on the bladder wall and staring one in the face could hardly be missed by the cystoscopist, bleeding or no bleeding. But if there is no tumor within the bladder to explain the hematuria, it is of immeasurable assistance to the cystoscopist to have a flow of blood to guide him to the source of bleeding—a bleeding varicosity in the mucosa overlying an enlarging prostatic lobe, or more

helpful still, an intermittent spurt of bloody urine from one or the other ureteral orifice to indicate which one of the two kidneys is doing the bleeding.



Fig. 2

If treatment is to be all definitive and prognosis anything more than pure speculation, there is much more to the diagnosis of a bladder tumor than its mere cystoscopic recognition. Its degree of malignancy must be determined. And the depth of invasion into or through the bladder wall must be determined. It is perfectly obvious from the three sketches in Fig. #2 that the matter of malignancy and especially that of malignant infiltration must govern in the handling of any bladder tumor. The so-called benign papilloma represented in the first view can be destroyed nicely by transurethral electro-coagulation. Simple destruction of the protruding part of the second tumor, however, would be obviously inadequate. And in the type of tumor indicated in the third view, anything short of radical surgery would be palpably futile.

The question of remote metastasis must, if possible, be determined. And there are other less fundamental but none the less practical matters to be considered. The mere location of the bladder tumor may determine to a large extent its curability. A large infiltrating cancer in the dome of the bladder is often curable simply by excising the top half of the bladder, taking with it a wide margin of normal bladder wall. On the other hand a relatively small cancer infiltrating deeply into the muscularis at the bladder neck demands the somewhat more dangerous and very mutilating procedure of total cystectomy — prostate, seminal vesicles, bladder and all — not to mention the added procedure of ureterosigmoidostomy or skin ureterostomy to provide for the future egress of urine. And since most bladder tumors occur near one or the other ureteral orifice it becomes necessary

to study the upper urinary tract to determine the degree of renal damage that has occurred from strangulation of the lower ureter as it passes through the cancerous growth.

Much information concerning the degree of malignancy can be had from careful cystoscopic study of the gross appearance of a bladder tumor. Practically all low-lying, broad-based tumors — whether ulcerative or not — are of relatively high malignancy and deeply invasive. Especially if ulceration and encrustation is present or if areas of leukoplakia within the bladder suggest a tumor to have elements of metaplastic squamous epithelium they are certain to be highly malignant.

The papillary tumors vary widely in their malignancy. In general the smaller the tumor the more delicate its fronds and the more narrow its pedicle, the less malignant it will be found to be. Aside from these general characteristics there are three other matters to be carefully observed in the cystoscopic study of tumors each of which gives much information as to their malignancy. Tumors that are multiple, whatever their cellular structure may be, are likely to recur and in a clinical sense are more malignant simply because of their multiplicity. Areas of ulceration and encrustation mark a papillary tumor as being malignant. And any material increase in vascularity with elevation of the mucosa surrounding the pedicle of a papillary tumor always suggests submucous infiltration marking the tumor both malignant and highly invasive.

All bladder tumors are malignant. Even the simple papilloma with delicate fronds, a small pedicle, completely innocent cellular structure and no invasiveness whatever is a potentially malignant tumor. However innocent it may appear, it tends to spread or implant itself elsewhere within the bladder and, once destroyed, it tends to recur. It is this tendency for papillary tumors to recur that makes cystoscopy so important every six months or year after removing the original tumor — that, together with the possibility that a recurrence, however innocent it may at first be, might undergo truly malignant changes before symptoms appeared to announce its presence. Destruction of small benign papillomata of this sort ordinarily is a very simple matter. With a bit of fortitude on the patient's part they often can be coagulated through the

cystoscope as a simple office procedure. It were far better, however, that such a patient be hospitalized and anesthetized to permit removal by a clean cut with the loop of the resectoscope and proper coagulation of the area of the bladder wall from which the tumor has sprung. There is more finality to such a procedure and besides, it has the added advantage of furnishing biopsy material to check against the occasional case of real malignancy in a small tumor of disarming appearance.

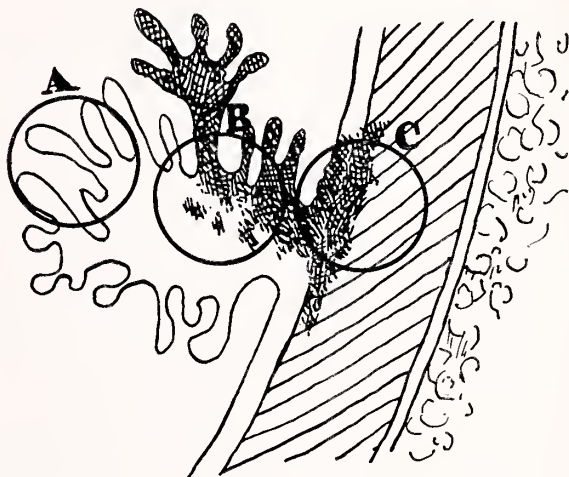


Fig. 3

I am certain our pathologists will bless me for showing this illustration (Fig. #3). Its message, of course, has to do with the collection of proper material for biopsy of a bladder tumor. Like most schematic drawings it oversimplifies matters somewhat. Yet it is perfectly true that the story the pathologist reads from the cellular structure of a section of bladder tumor can vary considerably depending upon the location from which the section is taken. There are tumors sufficiently malignant to lead to early death, having areas such as "A" which any pathologist would grade very low in the scale of malignancy. A section taken through the stalk of the tumor at "B," however, would disclose substantial evidence of malignancy. And a section taken at "C" by including bladder wall tissue would add the significant fact that the tumor is highly invasive and the more dangerous.

This same Fig. #3 will serve well to illustrate the clinical problems that is presented

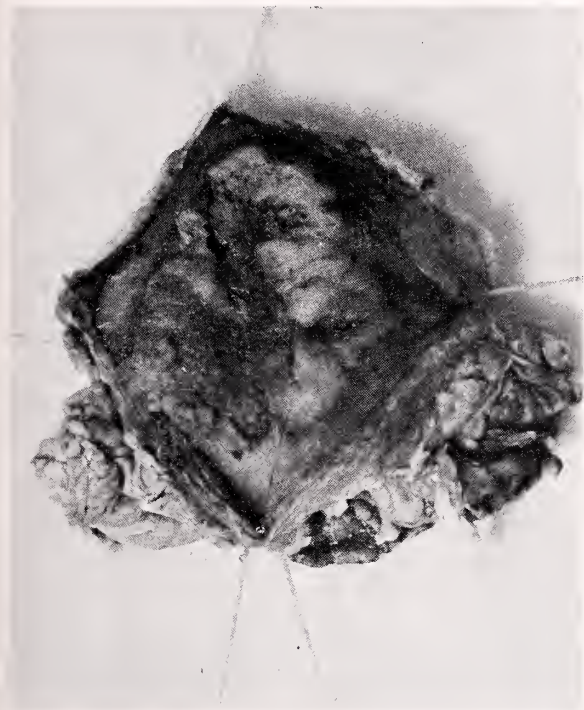
by a true papillary carcinoma of the urinary bladder. They can vary in size from that of a pea to a hen's egg and still fall within the architectural pattern that this sketch portrays. There is no problem in all urology that is so confusing and so challenging as that presented by a tumor of this type. If the tumor lies high in the bladder vault the answer is fairly simple. Subtotal resection of the tumor-bearing area then can be radical and still leave the urinary system intact. Unfortunately, however, most tumors occur at the bladder base near one of the three important orifices, and anything like adequate surgery becomes a difficult and mutilating affair. As the years pass I find myself growing more bold with this type of tumor. Yet, when invasion is not palpably deep within the bladder wall and when adequate open surgery necessitates sidetracking the urine from one or both kidneys, my inclination still lies on the side of transurethral resection of this type of tumor. After all, it is possible to be quite radical with the cutting loop of the resectoscope. A substantial number of tumors of this type can be cured by bold resection providing there is minimal invasion of the sub-mucosa. And the immense gratification of having left one with his urinary apparatus to function normally is too great to be taken lightly. To be at all thorough and effective in the transurethral removal of an infiltrating bladder tumor one cannot rest with destruction of the intravesical mass and brushing the base with the coagulating current. Cure of such a cancer necessarily must involve complete destruction, both in depth and in breadth, of all of the bladder wall harboring cancer cells. Nearly the entire thickness of the bladder wall must be cut away with the wire loop and the cutting must be carried widely beyond the evident margins of the tumor. That calls for a high degree of courage and dexterity. The risks, however, are not forbidding if one leaves for open surgery those tumors of that part of the bladder dome that is covered by peritoneum and limits transurethral excision to those areas of the bladder wall that are solidly fixed in the surrounding pelvic structures. Even deliberate full-thickness resection of a sizable area of the fixed bladder wall usually can be accomplished with complete hemostasis and a week or two of careful post-operative catheter drainage

will ordinarily suffice to prevent perivesicular extravasation of urine. In those few cases in which bleeding gets out of bounds or urinary extravasation occurs requiring secondary suprapubic exposure, the procedure still has the advantages of having permitted destruction of the tumor under far better visualization than in the opened bladder and of escaping much of the danger of planting uncooked and viable tumor cells into the fresh cut tissues of the cystotomy wound. Incidentally, neither the proximity of one of the ureteral orifices nor the internal urinary meatus requires particular consideration in resecting a bladder tumor. If they are cut clean with the wire loop and not too heavily coagulated, their lumen will re-establish nicely and without stricture.

Despite all the worth that lies in the transurethral management of bladder tumors, there are certain types and degrees of bladder cancer that are completely beyond any such conservative means. A certain small percentage of bladder cancers begin as highly invasive, low lying and rapidly ulcerating lesions. To whittle away and cook such a tumor is but to scratch its surface. With cancerous invasion extending deep into the bladder wall and beyond, nothing in the way of surgery short of complete and clean excision of the entire lesion can hold the slightest promise of cure. If tumor cells have reached the regional lymph nodes they, too, must be removed by block dissection. And if the tumor has extended beyond the regional lymph glands, there can be no hope whatever of cure.

Perhaps it is well to digress at this point and mention the fact, both interesting and of enormous import, that bladder cancers are comparatively slow to metastasis. Indeed, it is the rule rather than the exception for a pathologist to examine the body of one dead of bladder cancer without being able to demonstrate metastatic lesions, death having occurred from a combination of uremia and sepsis the result of obstruction from malignant infiltration of the lower ureters or the bladder neck. For cancer thus to cause death without the advent of remote metastasis is a circumstance quite unique in tumor pathology. It is this lag in the remote spread of cancer that is the basis upon which reasonable hope may be held for the cure of even

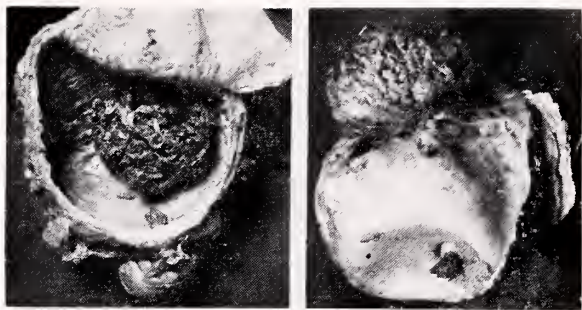
advanced bladder cancer when circumstances permit of surgery sufficiently radical to remove all of the local pathology.



Case 1

In Case #1 one sees a highly malignant, highly invasive cancer that happened to develop in the bladder dome. Peritoneum overlying some of its outer surface was puckered and thickened in testimony of the complete cancerous penetration of the bladder wall. This dear old lady hardly had more than the edges of her trigon left to sew into a sort of bladder around the head of a Pezzar catheter. Yet she lived for years, and died with a normal bladder — not alone free from tumor but normal in size and capacity. The curability of advanced bladder cancer is sometimes surprising and the power of regeneration of the bladder wall is always amazing!

For the moment let us assume that in Case #2 there had been but the one large tumor seen in the bladder dome. The second small tumor near the internal urethral orifice made it too much to hope for a cure short of total cystectomy and that is what was done. But let us assume that only the large lesion in the bladder dome was present. Like the flat in-



Case 2

filtrating lesion in Case #1, the tumor was in an ideal spot for complete excision. Both were deeply invasive. Both were of a cellular structure indicating a high degree of malignancy — Grade IV in the infiltrating tumor and Grade III in this papillary tumor. Despite the slightly more favorable cellular picture, however, the prognosis in wide excision of the bladder dome in this case would be less favorable than in the case of the old lady. The reasons are both interesting and important. Neither is particularly liable to have developed remote metastasis. We have already said that bladder tumors are slow to jump to distant regions and that fact becomes increasingly true as the tumor is found farther and farther from the bladder neck. But the papillary tumor is far, far more liable to metastasis within the bladder itself. Indeed, it already had done it! Whether through tissue predilection, by submucous lymphatic extension or by actual cell implantation, papillary tumors tend to spread and multiply within the urinary bladder. And that clinical fact increases their malignancy, whatever their cellular structure may be.



Case 3

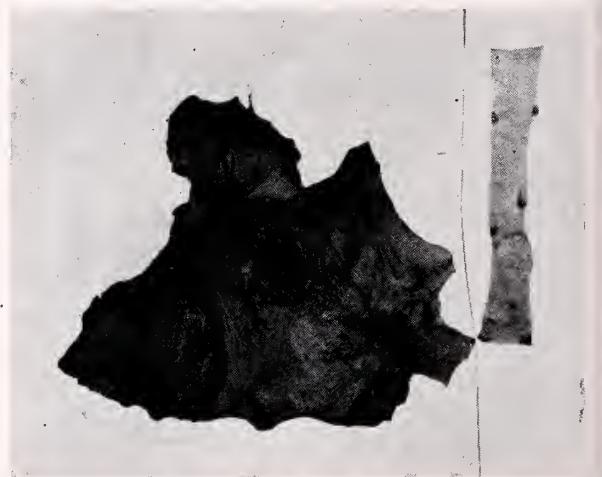
There is a second reason why the papillary tumor of the bladder dome would be more liable to kill than the infiltrating tumor if segmental resection of the tumor-bearing area of the bladder wall were to be the surgical procedure to be employed. Tumor cells will readily implant and grow in fresh cut tissue and this is particularly true of the cells from papillary bladder tumors. There is nothing quite so disheartening as to see this sort of implantation metastasis in the belly wall after having opened a bladder to excise or destroy a papillary tumor (Case #3). The danger of this implantation metastasis is just great enough to make one always hesitate before attempting destruction of a papillary bladder tumor by open surgery. It were far better, if a tumor can be adequately destroyed by electro-coagulation, that it be done transurethrally. And when I do have occasion to open a bladder containing a papillary tumor, I am just old fashioned enough to want to slush out the bladder cavity and the soft tissues of the prevesical space and belly wall with a can full of ether. I have no figures to show that it reduces materially the likelihood of this sort of tragic implantation metastasis but I do recognize the danger and I always have an abiding hope that ether will make some difference in the viability of fragmented tumor cells.



Case 4

While the majority of papillary bladder tumors can be best managed by transurethral methods or segmental bladder resection, there are certain types in which nothing in the way of surgical attack could be considered at all adequate short of total extirpation of the entire tumor-bearing organ. This is true in relatively benign tumors that recur with great persistence or when, as in Case #4, they grow rapidly and are distributed widely over the entire bladder surface. This bladder has been inverted for photography and one can readily appreciate the extent to which its cavity was packed by the mass of papillomatous tissues.

Any tumor on the bladder base that is sufficiently invasive as to present palpable induration on rectal examination is certainly beyond the possibility of surgical cure except by total cystectomy. When this finding is to be taken as a guide to proper surgery, however, palpation must be done under the muscular relaxation of a general anesthetic. Not infrequently an invasive tumor near one or the other ureteral orifice, entirely beyond the reach of a palpating finger, can be caught bimanually under anesthesia and its zone of intramural induration clearly outlined. Once intramural or pericystic invasion is clearly palpable, radical cystectomy is the only surgical procedure that could possibly promise hope of cure.



Case 5

Comparatively rare though it may be, I cannot refrain from making mention of the occasional occurrence of bladder tumor as a secondary lesion metastatic from a parent

papillary tumor of the renal pelvis. Two years before, Case #5, had had a nephrectomy, elsewhere for renal tumor. Its exact nature is not known but with papillomatous lesions in the stump of the ureter and others within the bladder it is a safe assumption that the renal tumor was a papillary carcinoma. In any event the slide serves to illustrate the importance of removal of the entire ureter and making careful cystoscopic study for possible bladder transplants whenever nephrectomy is done for a papillary tumor of the renal pelvis.

Until quite recently total cystectomy was too formidable a procedure to be undertaken by most surgeons and then only as a last resort. The procedure was made doubly complicated and difficult by having to divert the urinary stream either to the skin surface or to the lower bowel — the former a most disagreeable inconvenience to the patient and the latter fraught with many disturbing renal complications. Moreover, local recurrence in the stump of the prostatic urethra or body of the prostate and seminal vesicles soon pointed to the added necessity of complete extirpation of these organs together with the bladder specimen. And finally, hemorrhage and shock were formidable deterrents to such radical surgery in patients at all debilitated or well along in years.

Thanks to one of the great lessons of the recent war, however, whole blood has come to be almost routine during heavy surgery of this sort. Nowadays with two or three pints of whole blood given before and during surgery a patient leaves the operating table in excellent condition despite a blood loss that in prior years would have been considered prohibitive. Anesthesia has been improved immensely and one or two hours in the operating room no longer is an important factor mitigating against radical surgery of this type. Moreover uretero-intestinal anastomosis has come to be highly successful through proper pre-operative bowel preparation and the generous use of the antibiotics, both of which have combined to minimize the inflammatory reaction at the seat of the anastomosis and render the several accepted types of procedure quite uniformly successful. Thru these several circumstances cystectomy combined with bilateral uretero-sigmoidostomy, is coming to be done more and more commonly as a one stage procedure.

The final answer to the successful treatment of bladder cancer has not yet been written. Surely at some future time an all merciful Providence will put into our hands some new biochemical development or some physical modality that will permit this dread disease to be more simply and certainly controlled. There are new stirrings both in the field of radiation physics and in the field of hormonal chemistry that give great promise, not to mention the unknown and apparently vast possibilities that lie in the field of atomic energy. Until then, however, surgery in one form or other will continue the greatest refuge for those with bladder tumor. And as in cancer of the breast, the bowel, and elsewhere, the surgery of cancer of the bladder will doubtless reach its fullest development only on that day when better diagnosis, improved surgical technique and dauntless courage combine to make us all quick to recognize, prompt to proceed and completely bold and devastating in our attack.

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the effects of radioactive phosphorus have been disappointing; special advantage over the effects of roentgen-ray therapy has not been encountered on clinical trial. The nitrogen mustards have shown decided benefit in some cases of disseminated Hodgkin's disease.

Well-planned roentgen therapy, however, still affords invaluable palliation in the majority of the lymphoblastomas; remissions may last over several years.

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Radiologic Treatment of Tumors of the Thorax*

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Tumors of the mediastinum and neoplasms of the lungs and esophagus, whether benign or malignant, primary or metastatic, should be considered in a discussion of tumors of the thorax.

Tumors of the Mediastinum

Fortunately, in the treatment of tumors of the mediastinum it has been found that benign tumors outnumber malignant growths. In a series of 55 tumors of the mediastinum Heuer and Andrus found that twice as many were benign as were malignant.

As a rule, symptoms and signs of mediastinal neoplasms are due to pressure of the tumor on the mediastinal contents and they develop slowly. Dyspnea, cough, mucoid sputum and cyanosis are indications of pressure within the mediastinum. Pain, loss of weight and evidence of distant metastasis occur late in the development of the tumors. In some instances the tumor is large enough to cause bulging of the wall of the thorax. There are few if any localizing signs. If hair is coughed up this indicates the presence of a dermoid cyst; expectoration of hooklets or scolices may indicate hydatid cyst; Horner's syndrome suggests a neurogenic tumor and pressure on the paravertebral sympathetic chain.

The mediastinum is composed of many different types of tissues and tumors may rise from any of these. Also, embryonic rests may form the beginning of many tumors. Consequently, a wide variety of tumors may be encountered. Andrus and Heuer suggested the following classification:

I. Cysts:

1. Dermoid cyst or teratoma.
2. Cysts of endodermal and mesodermal origin.
3. Cystic lymphangioma.
4. Echinococcus cyst.

II. Connective Tissue and Neurogenic Tumors:

1. Lipoma.
2. Chondroma and chondromyxoma.
3. Xanthoma.
4. Fibroma and fibroleiomyoma.
5. Neurofibroma and neurinoma.
6. Ganglioneuroma.
7. Neuroblastoma and sympathicoblastoma (sympathigonioma).
8. Neuroepithelioma.
9. Sarcoma of the mediastinum.

III. Primary Tumors of the Mediastinal Lymph Nodes.

1. Lymphosarcoma.
2. Hodgkin's disease.
3. Endothelioma.

IV. Primary Tumors of the Thymus.

V. Carcinoma of the Mediastinum.

In the anterior mediastinum, the teratoma or dermoid cyst is the commonest type of tumor. Tissues from all three layers are usually present. Sebaceous material, hair, bone, cartilage and teeth may be present. About 11 per cent of teratomas become malignant.

Tumors in the posterior mediastinum are usually neurogenic. A small proportion may become malignant.

Lymphosarcoma is the commonest mediastinal tumor and 50 per cent of some series of tumors are of this type. The occurrence of lymphosarcoma of the mediastinum among men and women is in the ratio of 2:1. This type of tumor occurs most commonly in persons 30 to 50 years of age. The symptoms and signs are those of mediastinal compression; involvement of the cervical nodes and pleural effusion are often encountered.

While Hodgkin's disease and lymphosarcoma may begin in the mediastinal nodes, involving the right and left paratracheal nodes and tracheobronchial nodes, more often they originate insidiously in the tonsil, nasopharynx, cervical nodes or retro-abbominal

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nodes and later involve the thoracic structures.

Diagnosis. — Diagnosis of mediastinal tumors is made by means of roentgenograms, roentgenoscopy, bronchoscopy, aspiration biopsy, exploratory thoracotomy and biopsy, or biopsy of a metastatic lymph node.

Metastatic tumors, which arise from tumors of neighboring organs, or from carcinoma of the esophagus or breast, greatly outnumber the primary tumors of the mediastinum.

Treatment. Benign Tumors. — Benign tumors of the mediastinum demand prompt surgical treatment. The recent spectacular advances in operations on the thorax have made excision of tumors of the thorax a much safer procedure than heretofore. If the tumor cannot be excised, serious symptoms eventuate, infection and complications play a dangerous role, and carcinomatous or carcimatous degeneration may occur in any benign tumor.

Malignant Tumors. — Treatment with irradiation takes precedence over surgical intervention in most cases of malignant tumors of the mediastinum. This is true especially in cases of lymphosarcoma and Hodgkin's disease. Lymphosarcoma is a type of tumor which is very radiosensitive but not radio-curable. Under treatment with irradiation the tumor shrinks rapidly because of this radiosensitivity. This fact helps to distinguish the lesion from the more resistant endotheliomas and carcinomas. After satisfactory initial response to irradiation, recurrence of the tumor is the rule, and gradually the effect of further courses or irradiation diminishes. Lymphosarcoma and Hodgkin's disease both are derived from lymphoid cells, the most radiosensitive cells in the body; hence, treatment of both these malignant conditions may be discussed together.

Irradiation therapy for lymphosarcoma and Hodgkin's disease involving the nodes in the thorax may be carried out by various techniques. A large single dose of roentgen rays may be employed; the "saturation method" of adding treatment to compensate for daily loss of effect is sometimes used; a method in which divided doses are used with varying time intervals is effective in some instances; the Coutard method may be used, or telecurie-therapy can be employed if large amounts of

radium are available. At most clinics roentgen-ray therapy is employed. Some radiologists prefer using 200 kv., 15 ma., 2mm. copper and 3 mm. aluminum filters, distance 50 to 80 cm., and treating one anterior and one posterior port each day, and occasionally lateral and oblique ports also. One hundred to 200 r (measured in air) are given daily, to a total dose of 2,000 to 2,500 r to a field. This series may be repeated in six weeks or two months.

At the Mayo Clinic, moderate voltage, that is, 130 to 140 kv., has been preferred. Desjardins has always said that rays generated at a moderate voltage have a superior effect on these highly radiosensitive tumors. Clinical experience has shown that the lessened quantity of rays generated at this voltage, and the change in quality permitting increased absorption of rays in the involved nodes cause satisfactory regression of the lymphoblastomas. Also the effected nodes respond to further series of treatments for a longer time than they do when higher voltage is used. In the treatment of mediastinal tumors with this moderate voltage other factors included are: 6 ma., 6 mm. aluminum filter; distance 40 cm., and a total dose of 500 to 600 r per field, measured in air. Two large anterior and two corresponding posterior fields are used, and the rays are directed toward the mediastinum. About 275 r per day is given to each field.

During the course of daily treatments, leukocyte counts should be made daily. If the count drops below 4,000 per cubic millimeter of blood, treatment is discontinued until the count returns to normal, which usually occurs in a day or two. If the count fails to return to normal in three days, treatment is discontinued for a time.

The course of lymphoblastomas may be acute or chronic. Long remissions over many years may occur in the chronic types, especially if well-planned irradiation therapy is used. Eventually, the terminal phase is reached, with a progressive decrease in the erythrocyte count and lessened response of the tumors to irradiation.

Bradford, Mahon and Grow stated that the most frequent site of origin of primary carcinoma of the mediastinum is the thymus. Andrus and Heuer stated that only about 100

such tumors have been reported; 75 per cent have been diagnosed as lymphosarcoma and the remainder as carcinoma or sarcoma. The former may arise in lymphoid tissue and the latter in the reticular cells. Irradiation has afforded palliation in some cases, but carcinomas and sarcomas are resistant to irradiation.

Tumors of the Lungs

Carcinoma of the lungs, when localized, often may be successfully adlated. Most pulmonary carcinomas metastasize widely and are radioresistant. Palliation may be obtained by irradiation in some cases, as well as relief of cough, pain and hemoptysis. The general condition of the patient shows improvement. At Memorial Hospital in New York City large ports have been used, with 200 kv., giving 300 r per daily dose until a total is reached of 3,000 r to each of two fields, an anterior and a posterior. At the clinic, Leddy has pointed out that patients referred for radiotherapy are usually debilitated and often have extensive inoperable lesions. Palliation is all that can be offered by treatment. Furthermore the lesions, usually squamous-cell carcinoma or adenocarcinoma, are of high grade in 80 per cent of the patients. Leddy has abandoned heavy roentgen-ray treatment, except in the unusual patient who is in excellent physical condition. Instead he has found it safer to use two courses of relatively mild doses of roentgen rays than one course of heavy irradiation. Four fields are used and the rays are directed in such a way as to crossfire the lesion. The factors of treatment are: 200 kv., 20 ma., 0.75 mm. copper filter, 1 mm. aluminum filter, distance 50 cm., 500 r measured in air, per field given in four days. The life expectancy of these patients is only a few months, or at most a year.

Occasionally, on bronchoscopic examination localized carcinoma may be found and radon seeds may be inserted through the bronchoscope. One such patient, treated at the clinic ten years ago for adenocarcinoma of the bronchus, grade 4, is apparently perfectly well at the time of this report.

Tumors of the Esophagus

Carcinoma of the esophagus causes about 2 per cent of all deaths from cancer in the United States. Men with this disease outnumber women 5 to 1; the age of incidence

is 40 to 60 years. In a series of 8,572 cases reported in the literature carcinoma developed in the upper third of the esophagus in 20 per cent, in the middle third in 37 per cent and in the lower third in 43 per cent.

These tumors frequently invade the trachea, bronchus, or even the lungs and tend to metastasize widely. Most of the carcinomas are epidermoid, and predominantly of high grade.

Irradiation treatment may be by means of radium or by roentgen rays, or a combination of the two. Implantation of radon seeds, or the use of strong radium tubes in an esophageal bougie placed in the malignant stricture under the roentgenoscope, have not been too successful. Homogenous irradiation of an asymmetrical growth is not possible by internal treatment, and if the cancer involves the entire esophageal wall and is destroyed by the irradiation, perforation of the wall and fatal mediastinitis may occur.

Of late years, treatment with roentgen rays applied externally has offered more satisfaction than irradiation applied internally, especially with supervoltage therapy of 400 kv. or higher. Preliminary gastrostomy may be performed to maintain the patient's nutrition. Protracted irradiation with small fields or use of rotation therapy may preserve the skin while a dose is delivered to a satisfactory depth. Much palliation and occasional arrest of the tumor may be gained by treatment.

Tumors of the Heart

Tumors of the heart will not be discussed here. Malignant tumors in this location are very rare. There are practically no pathognomonic signs, and few are discovered antemortem.

SUMMARY

In summary, radiologic treatment has no true curative role in tumors of the thorax. Early diagnosis is essential and surgical excision of the tumors is most likely to cure. It is difficult to ascertain by roentgenograms alone whether a tumor in the thorax is benign or malignant; biopsy also is necessary. Metastatic tumors of the mediastinum result mainly from primary growths in the lungs, esophagus, or breast, and sometimes from growths in the abdominal viscera.

However, palliation, in carcinoma or sarcoma of the contents of the thorax, can be gained by irradiation, and is well worth while. Especially is this true in mediastinal involvement of the fairly common lymphosarcomas and in Hodgkin's disease, for surgical intervention is not helpful in the treatment of either condition. There was hope that the recently developed radioactive isotopes could be effective in the treatment of lymphoblastomas, but

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PRESIDENT'S PAGE

JULY MESSAGE

By this time the committee appointees will have received word of their assignments for this year. It is desired that each man of each committee will function as if each were the only one of the Association. Each Committee has a definite function given to it by the Association after due thought and deliberation, and for a definite purpose. Active

committee work saves much time for the Association by gathering information and then, after deliberation and judgement, formulating an opinion and recommendation for presenting to the Delegates at the annual meeting. With the help of the Executive Committee, appointments have been made with the personal interest of the individual and his abilities in mind. No doubt there will be some dissatisfaction, but it is not the easiest to satisfy all situations and all individuals. We have done the best WE could, and believe that every appointee will do HIS best.

One committee in particular, I wish to commend to each of you. That is the Committee on Medical School Affairs. It has a double function; one, being an advisory committee to the Administration of the School, and the other, duty imposed on it by the Association, of forming and directing The Medical School Endowment Corporation. We, as physicians, are naturally, most interested in Medical Education, especially in South Dakota, and must recognize that finances determine the success or failure of any such program. The Corporation is now a reality, but the finances are, as yet, somewhat a matter of imagination. It has been suggested by Dr. George Stevens, of Sioux Falls, that a real fund would soon accrue if each doctor of the State would give to the Fund, each year, on the anniversary of his licensure in South Dakota, one dollar for each year he has been in practice. That does not seem like a great amount, but in the aggregate it would soon build up to enough to do great things. We would, none of us, find this amount a hardship to part with. It is deductible on your income tax returns, so that actually the amount paid would be less than your actual contribution, and from a South Dakota standpoint, it would do much more for US than the same amount paid into the Treasury of the United States. Think that over a bit, and then sit down and write a check to the Endowment Fund, and mail it to John Foster, First National Bank Bldg. in Sioux Falls. Better still, DO IT NOW. We don't need a four year school in the state, but we can have the BEST two year school in the United States if we have the money for building it and for continuing high quality teaching and research.

There is nothing to stop you from sending in more than one dollar per year, either, if you want to do so.

EDITORIAL PAGE

WHAT OF TOMORROW?

JAMES C. SARGENT

Milwaukee

It is a privilege, I assure you, to be invited to come to Huron and take part in your annual meeting. I have enjoyed the prospect of discussing the important subject of bladder tumors with you. To have been asked to address you on a more general subject, however, is especially flattering and I acknowledge the honor with real appreciation. In choosing my subject I first considered discussing some of the challenging professional problems that I have seen facing organized medicine during a quarter century of quite active service in my County and State societies and in the American Medical Association. Rather, I propose today to raise sights somewhat and consider the larger problems of the future of free America and the responsibility that doctors — you and I — have in helping to shape it.

After all, what can it profit each of us to spend days such as these in an effort at individual attainment in one or the other fields of medicine in our Country is to continue hell-bent on the heels of the old world in its socialistic orgy dragging everyone down and down to a common level of accomplishment? What possibly can be the gain in standing with our backs to the wall fighting the perennial issue of a Thomas-Murray-Dingell Bill when compulsory health insurance is but an item in the whole mosaic of statism that is being fashioned so rapidly for us here in America. Is it possible that our responsibility to our profession transcends that of our obligation as an American citizen? It is that that I have chosen to discuss today.

American Labor

I would be among the very last to condemn the principle or oppose the practice of or-

ganization of labor and other groups for potent self expression. That is as American as a County Fair. Indeed our own profession is a votary of that principle and it has been through the great power of an organized profession that we have been able to make such progress in the prevention of disease and the care of the sick here in America.

Organization of large special interests groups, however, is freighted with possibilities for great harm and there are aspects of the American labor movement that exemplify it. I would point to just a few that presently need the notice of civic minded citizens. The power of a union over its individual members has come perilously close to that of master over slave. The chance for perceptor training in the trades is being sharply limited. Prohibitive dues have been used to deny a man the opportunity to ply the trade he has learned. He is told how many bricks he can lay each day — and what days of the week he can enter the mines. He is even being fined for transgressing union orders. And much too often, nowadays, you and I see families suffering from prolonged unemployment of the wage earner forced by some jurisdictional or other labor dispute that is of no interest whatever to him and that he despises but does not dare protest.

The power of organized labor here in America has reached a point out of all proportion to the numbers of citizens it represents. Racketeering has wormed its ugly head into control of certain unions. At times organized labor has shown complete disregard for the fundamental rights of other citizens. It has revealed arrogance and dictation that no self-governing society should or could long tolerate. Some of the antics of Caesar Petrillo and of John L. Lewis come at once to

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mind. Only recently the dictatorial voice of Green was insinuated menacingly into the deliberations of the United States Senate through the mouth of a political puppet. Recently also, and of portent that should startle us, we have seen communist Russia holding dress rehearsal for her day of world revolution through Harry Bridges' paralyzing strike in our one great island outpost in the Pacific.

And now we have organized labor actually bent upon shaping the composition of Congress to fit its selfish ends. A purge is openly announced and underway. There is a "black list" of Senators — Democrats as well as Republicans — to be defeated in 1950. Green recently told one of his AF of L brotherhoods, "There will be no hunting, no fishing, no sports, no nothing on election day but voting. We must rid Congress of reactionaries—" Does anyone in this room doubt the course of events if that arrogant aim is achieved? More to the point, have the physicians of America a duty in meeting, head on, this attempt to take from the halls of Congress the voice of conservative people? On Mr. Green's purge list is Senator Taft of Ohio, Senator Capehart of Indiana, Senator Wiley of Wisconsin, Senator Hickenlooper of Iowa, Senator Donnell of Missouri, Senator Young of North Dakota, and your own Senator Chan Gurney. That just about completes the roll call of the Senators here in our conservative midwest who are up for re-election this fall. Surely this meeting can interrupt its scientific thinking a moment while each of us contemplates the meaning of the threat that this political purge holds for America. Surely each of us can afford a share of our interest and effort in the months to come to see that these able conservatives are returned to further important service in our Congress.

Political Patronage

There is nothing more threatening to the preservation of a vigorous and thriving America than the increasing disregard for ability and aptitude being shown by those in authority in their choice of appointments to public office. A bit of pork-barrel politics is a natural, perhaps a healthy, part of a free society such as ours. David Harum once said "A few fleas is good for a dog." But matters have become serious, indeed, when political debts are paid, the labor vote is bought, and

pet social theories, even, are fostered by the appointment to high office of inept and sometimes obviously prejudiced people. In perfect illustration I would recall the way in which Mr. Roosevelt deliberately protected his "new deal" from the ordinary processes of law by a series of appointments that left the Country saddled with the most confused and impotent Supreme Court in its history. What a commentary that nine jurists should find themselves in utter disagreement three-fourths of the time! Yet there is hardly reason for surprise. Between them, the nine men presently composing the Supreme Court of the United States have had a grand total — yes, a total for the whole nine — of just ten and a half years experience as jurists to fit them for their high office.*

It was planned by the founding fathers of this nation that its Supreme Court would stand with and above the President and the Congress. A hundred and fifty years proved the wisdom of that tripartite form of government. Is it of importance to the physicians of America to see that the judiciary, now so impotent, be re-established in its proper relation to the executive and the legislative branches of our government? Have we any responsibility in this matter of the qualifications of appointed public servants?

Federal Grants in Aid

Another of the cankerous growths sapping the vitality and vigor of this great nation is the popular political pastime of the federal government allotting grants to the states to inspire and to aid the states in this, that and the other welfare project. Already the variety is legion and runs the gamut from federal subsidy of hospital construction on down to noon luncheons for school children. Despite its fundamental unsoundness, the idea of state aid has caught on and spread like wildfire. Even the doctors have been tempted by its alluring picture and we have seen our national association add its "me-too" in Congress supporting a Hill-Burton Bill to inspire and subsidize hospital construction. All of which is the more amazing because the whole idea has so many things so obviously wrong about it. Quite evidently we common folks need a little coaching on the simple economic

* This figure was compiled prior to the death of Justice Wiley P. Rutledge but remains little changed by recent appointments.

facts of life. Uncle Sam is no Santa Claus. He gives South Dakota and its citizens nothing. With an amazing sense of superior understanding he merely takes South Dakota tax dollars, juggles them with dollars taken from other states, kitties out ample to maintain the expensive and ever-increasing federal bureaus in charge, takes out some more to distribute to the less prosperous states, then through one or another grant-in-aid gives back to the citizens of South Dakota whatever of their own dollars are left — always carefully compensating for the deficit by a set of rules and regulations as to just how that which is left is to be spent. It all is just as simple as that. And never, ever, was there so fancy a scheme devised to curry political favor and to concentrate political power in Washington. Is it not high time that "State Aid" comes to be understood for what it really is? What an exercise in semantics!

* * *

I shall not risk boring you with the details of other of the grave questions of today. There are others, however, and every one of them worthy of your careful consideration. Can the dignity and freedom of the individual, so long the greatest gift of this free land, survive the increasing clamor for more and more cradle-to-the grave security? Are you satisfied with the growing enormity of our federal bureaucracy? Are you alarmed at mounting taxes and the power of the purse that goes with them? Can this country longer afford the luxury of its deficit financing? Will our economy stand a prolonged and expansive program of European aid? Or, more recently, the President's "Point 4" program of aid to all the backward areas of this world? Should we continue the costly burden of underwriting an experiment in state socialism in England? Where lies our first line of defense against Communism; over in war-torn Europe, or upon a stable economy here in a solvent America?

These, each, and others too are matters over which the minds of intelligent, thinking citizens must ponder if our American way of life is to escape the effects of the social revolution presently consuming the other corners of the globe. You and I have grown soft on the lush years of the past. We are lackadaisical in our attention to what is happening be-

yond our own little sphere of immediate interest. We have fallen into the habit of assuming there are others who will think and act for us as we would do. Our record of citizenship is abominable; our civic interest a shame. And all of this despite the fact that there are mighty few among the hundred and fifty million Americans equally blest with the educational background, the analytic minds and above all the altruistic viewpoint with which doctors are endowed as qualifications for a leading part in directing the destiny of their nation.

I will not embarrass you by asking for a show of hands. But it is a safe bet that there are not a baker's dozen in this room today who have ever taken the pains to carry his views on an important question of public policy to one of his state or national representatives. Useful though it may sometimes be, only small credit may be had for merely following a suggestion and wiring a congressman for or against some particular legislation. It is a real civic service, however, to take the trouble to give a congressman or other public servant one's studied views on matters at issue.

And I commend the experiment to those of you who have never tried it. There is an agreeable surprise in store for you. Perhaps you have not considered the dilemma of a United States Senator faced with several thousand issues ranging from the threat of war to the purity of Penicillin. Or the quandry of a Governor faced with the signature of a highly controversial bill on vivisection about which he knows less than nothing.

Unless you happen to be the spokesman of a large block of voters your Congressman, your Governor, or your State Legislator would be interested only mildly if at all in what your personal wishes may be concerning an issue. If you but try, however, you will be astonished at how interested he becomes in the reasons why you favor or oppose an issue. And far more important still, he will genuinely appreciate receiving background information that is uncolored with bias and upon which he can really reply.

Will I be pardoned just one personal experience in illustration of the fact that you and you and I can play an effective part in

our government if only we will? Shortly after the close of the last war, some of us determined to do something about the profligate waste of the talents of physicians serving with the military. Those of you who were in uniform may recall receiving a detailed questionnaire concerning your own activities as a medical officer. Armed with the information coming from those 55,000 questionnaires the three physicians comprising the Executive Committee of the A.M.A. Council on National Emergency Medical Service spent two days in Washington. They called upon the late Mr. Forrestal, then Secretary of Defense, Mr. Hill, then Secretary of the National Security Resources Board, Mr. Sullivan, then Secretary of the Navy, and Mr. Symington, Secretary of the Air Force. It took but a few moments to recount to each the important background information they had gathered concerning the great waste of medical talent by the military establishment throughout the years of war. They pointed out that this waste had drained civilian communities of their doctors to a point actually threatening the health of the nation. They respectfully suggested that steps be taken now to avoid repetition of such an error if war is to come again.

Well, that two-day visit of three ordinary doctors had some prompt and remarkable results. The National Security Resources Board, created to advise the President on manpower and other war resources of the nation, promptly acquired a medical advisory board made up of civilian physicians. Another board of civilian physicians was appointed to advise the Secretary of Defense on medical care in the Armed Forces. And more recently Doctor Richard L. Meiling of Columbus, Ohio — one of the three who originally went to Washington with their message — has been called to the important post of Director of Medical Services in the Office of the Secretary of Defense functioning at a level above the Surgeons General. And with all of this, the medical departments of the Army, Navy, and Air Force have seen the light and are doing a notable job at reorganization for efficiency and conservation of medical personnel within their services. Such can be the result if informed and earnest citizens bring helpful information and advice to men in positions of great public trust.

And, gentlemen, don't you believe all of this tommyrot going the rounds about how impotent your American Medical Association is. Of course the starry eyed social dreamers so bent upon shackling American medicine would have people believe that every effort of the American Medical Association is simply worse than futile; that it does not speak the voice of the rank and file of physicians and that even if it did no one would listen, anyway. The story goes that you and I as individual physicians are the salt of the earth but our county, state, and national medical associations are simply no good at all. Gentlemen, don't you believe it. When organized medicine takes a well-considered position on any public issue its opinion carries great weight. Perhaps the most recent illustration of that fact lies in the Senate disapproval, by the impressive vote of 60 to 32, of President Truman's reorganization Plan No. 1. You remember the President was going to create a new Welfare Department in his Cabinet with health and education tied to the tail of an enormously expanding social welfare program and with Oscar Ewing sitting in the catbird's seat. The President was particularly insistent upon it. Organized labor plugged hard for it. Since it seemed to fulfill one of the major recommendations of his Commission on Reorganization of the Executive Branch of the Government conservative ex-president Hoover even gave the plan his endorsement.

It did not prove difficult, however, for organized medicine, operating directly and through its few work horses here and there about the country, to point out to members of the Senate the significance of this move to socialize American medicine merely by executive order. And once the voice of medicine was heard and clearly understood the issue was closed. I am happy to add, too, that South Dakota's Chan Gurney was prominent among those who opposed this oblique attempt of the President to foster state medicine upon the American public. Senator Gurney will need your support and encouragement, too, when this same oblique maneuver is again attempted in the weeks to come. Don't you believe all you hear about the impotence of organized medicine. It has its serious weakness but that weakness lies much more in the indifference and misgivings

of so many of its dues-paying members than in its organizational structure and its way of serving its purpose.

* * *

Again, may I express my appreciation for the real privilege of meeting with you. Particularly, am I grateful for the opportunity of discussing certain national problems that seem to transcend in importance even, the scientific subjects here before you. My satisfaction will have been complete if in leaving your fine meeting and your lovely State, I can but feel that here, today, each of us has covenanted one with the other to add some civic interest and effective citizenship to our calling; that as a group we shall return to our homes dedicated during the dangerous days ahead to strive for the preservation of the fundamental principles of personal liberty and of individual responsibility — principles upon which our blessed country has through its short history grown so very great. Already we have been led a long, long way. The hour is late and here we stand stark on the very brink of a welfare state, taxed on the one hand and regimented on the other, about to join the long list of other great nations now floundering in a morass of socialism.

Gentlemen, What of Tomorrow?

CUFF NOTES

Twenty-five Easy Ways of Getting Into Trouble in the Care of Fractures

Before treatment continued—

6. Failure to identify films with the patient being treated.
7. Failure to properly interpret x-ray films.
8. Failure to recognize the mechanism of production of the injury.
9. Inadequate records including initial recording of primary injury to vessels and nerves.
10. Failure to notify all concerned of the prognosis, including a description of complications and delays that may follow.

Gynecologic Mortality

Finn reviewing gynecologic deaths in a New York hospital found cancer to be the immediate or remote cause of death in 74.3%. The chief immediate causes of death were infection (24.4%), embolism (19.3%), gynecolo-

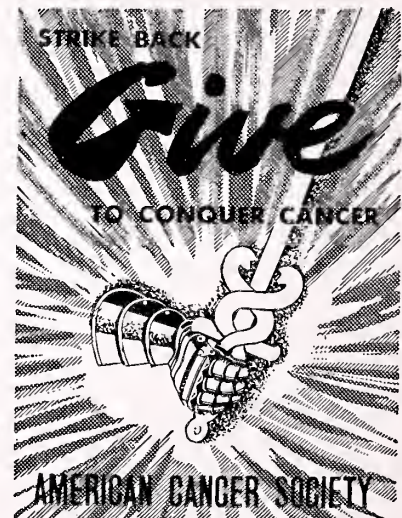
gic cancer (18.6%) and renal failure (17.1%). The leading remote causes of death were cancer of the Ovary (31.5%), cancer of the Cervix (17.0%) and cancer of the Endometrium (8.6%). — Gynecologic Mortality, Wm. Finn, Am. Jr. of Surgery, June 1950.

7105 M — McGinnis

Acute Appendicitis in Children

McLanahan shows that mortality rates have declined as much as 76% in the past 15 years. He shows a total of 823 cases of acute appendicitis with but 2 deaths—a mortality rate of 0.24%. He believes the results have been achieved through emphasis on the following points:

- (A) a policy of prompt operation regardless of suspected condition of the appendix
 - (B) adequate preoperative preparation especially for the ill child.
 - (C) the general employment of the McBurney incision.
 - (D) removal of the appendix whenever possible, employing gentle finger dissection in abscess cases.
 - (E) adequate postoperative care with special attention to fluid and electrolyte requirements in the small child.
 - (F) rational use of chemo therapeutic and antibiotic preparations.
- Samuel McLanahan, Acute Appendicitis in Children, Annals of Surg, June 1950.



This is



JULY
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YOUR MEDICAL ASSOCIATION

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

PRE-PAYMENT INSURANCE COMMITTEE MEETING

May 21, 1950—10:30 A.M.

Present were Chairman, **H. Russell Brown, R. E. Jernstrom, R. G. Mayer, C. E. Sherwood, W. H. Saxton, T. W. Reul, L. J. Pankow, John C. Foster**, and guests **Donald Slaughter and E. M. Stansbury, R. E. VanDemark.**

Dr. Brown read the proposed report of the Committee and a discussion was held. Dr. Sherwood moved approval of recommendation #1, seconded by Dr. Jernstrom, carried. Dr. Sherwood moved approval of recommendation #2, seconded by Dr. Mayer, carried. Dr. Sherwood moved approval of recommendation #3, seconded by Dr. Mayer and carried.

Dr. Sherwood moved approval of recommendation #4, seconded by Dr. Jernstrom, carried. Dr. Jernstrom moved approval of recommendation #5, seconded by Dr. Mayer, carried.

Discussion was held on communication from Sioux Falls District concerning insurance payments to hospital for certain medical services. Dr. Mayer moved that the communication be referred to the Committee on Medical

Education and Hospitals, seconded by Dr. Jernstrom and carried.

Dr. Sherwood brought up the matter of the South Dakota Plan being enlarged to cover osteopaths. Matter discussed. No action taken.

Dr. Brown read the report of operation of plan to March 31.

Discussion of Blue Cross. Metropolitan Casualty proposals to write an approved plan. Mr. Olson of Blue Cross introduced a spokesman for the Metropolitan Casualty.

A discussion of the St. Paul Mercury Indemnity Operation was held with Mr. Stevenson, Mr. Baker and Mr. York of Chicago.

Meeting adjourned at 12:20 P. M.

COMMITTEE ON DIABETES

May 21, 1950

The meeting was called to order at 1035 by Chairman **Dr. Morsman**. Present were **Drs. Morsman, Lenz and Donahoe.**

The Committee suggested that greater stress should be put on the care of the known diabetic, particularly to the effect that he be encouraged

to continue treatment. A discussion of this was led by the chairman.

Dr. Morsman announced to the Committee that during the past year ten out of twelve of the districts co-operated.

The committee recommends endorsement of self-testers for use by patients in checking their urine for sugar. The committee also recommended that a program be set up whereby a report of diabetics be maintained so that an accurate check can be made on the number of new diabetics during the year.

Dr. Morsman read a letter from the American Diabetes Association complementing the Committee on the work that it had done this past year.

The meeting adjourned at 12:10.

THIRD DISTRICT MEDICAL SOCIETY MEETS

Sixty members, wives, and guests of the Third District Medical Society met at the Hotel General Beadle in Madison, Thursday evening, June 8th.

After dinner in the hotel dining room, **Dr. Dean Austin**, President, presided over

the scientific and business program. He presented **Dr. Donald Slaughter**, Dean of the University Medical School, who spoke on ACTH and Cortisone. **Dr. Ralph Ferguson** presented a film on diagnosis of breast cancer.

Dr. L. J. Pankow, Sioux Falls, President of the State Medical Association, making his annual visit commented on some of the leading medical-economic problems of the day.

Other guests were; **Dr. L. M. King**, **Dr. Arnold Myrabo** and **John C. Foster**.

NEW SECTION REVIEWING CARDIOVASCULAR ADVANCES TO APPEAR IN "CIRCULATION," JOURNAL OF AMERICAN HEART ASSOCIATION

A new section reviewing the latest advances in the cardiovascular field and pointing out their practical application where appropriate, will be added to **CIRCULATION**, The Journal of the American Heart Association, in the fall of 1950. The new section, to appear monthly under the heading, "Clinical Progress," will be edited by **Dr. Herrman L. Blumgart**, Professor of Medicine, Harvard Medical School. **CIRCULATION** is published monthly by Grune and Stratton, New York, N. Y.

"Clinical Progress" will be inaugurated in keeping with the professional education aims of the American Heart Association to maintain **CIRCULATION** as a clinical guide to physicians and to in-

form scientists in one field of the latest development in other areas.

The new section will include contributions by recognized authorities ranging from 4,000 to 8,000 words, and representing critical judgments of the current status of the subjects handled. While historical reviews of the subject will not be included, some six or eight important bibliographic references will be made.

RESEARCH CAREERS IN HEART DISEASE FIELD SUPPORTED BY AMERICAN HEART ASSOCIATION

Acting to help meet the urgent need for qualified research workers who can concentrate their full time in the heart disease field, the American Heart Association is establishing Career Investigatorships as part of its research program, according to an announcement made today by **Dr. H. M. Marvin**, President of the Association.

Dr. Marvin said that a career of investigation in the cardiovascular field, supported by the Association, will be made available to "a select group of outstanding persons of unusual ability and originality," preferably in the 35 to 45 age group. "They will have the opportunity," he said, "of making research relating to cardiovascular problems their primary aim."

"Such provision for continuing careers for able investigators is one of the most important contributions that

can be made at the present time in the heart disease field," **Dr. Marvin** pointed out, "because of the severe shortage of qualified full-time research workers needed to probe into the many unknown factors."

"The Association has awarded in the past, and will continue to award, short-term grants to individual investigators as well as to institutions for research projects," **Dr. Marvin** said. "However, the major part of the Association's research funds will be given to support individuals who are interested in a career of research rather than to the traditional support of short-term projects."

Dr. Marvin explained that nominations for Career Investigators may be made by members of the Scientific Council of the American Heart Association, deans of medical schools, and heads of research units in the United States. The nominations should be sent to **Dr. Charles A. R. Connor**, the Association's Medical Director.

The Career Investigator will engage in research of his own choosing in the cardiovascular field. He may work in any institution in the United States which offers adequate facilities, and he will be free from additional administrative duties at that institution. Not more than 15 per cent of his time is to be spent in teaching. Certain Career Investigators may have access to patients, but any income thus created will be considered part of the stipend provided by the American Heart Association.

PHARMACEUTICAL DIVISION

BLISS C. WILSON, Editor

RECENT DEVELOPMENTS IN THE FIELD OF INSECTICIDES*

Wm. M. Rogoff, Ph.D.

Associate Professor, Entomology-Zoology
South Dakota State College

During the last few years, entomologists and chemists have continued making tremendous strides in the field of insecticides. The advent of DDT, chlordane, toxaphene, and benzene hexachloride, rather than serving as a deterrent to further research, provided the impetus for the development of still newer products and for a deepening of our understanding of methods of handling, mode of action, and effects resulting from the use of standard insecticidal formulations.

NEW PRODUCTS

Chlorinated organic insecticides

Among the chlorinated organic insecticides, the group that includes DDT, chlordane, toxaphene, and benzene hexachloride, several new developments have occurred. It had been known for many years that DDT can be secreted in the milk of dairy cows. Within the last few years, however, it became increasingly apparent that DDT, when taken into the body at low levels of intake, is deposited in body fats at a greater rate than it is excreted. Liver damage in laboratory animals, continuously fed low intake levels of DDT, has provided sufficient basis for reducing human exposure to DDT deposits. This does not mean that DDT, when used according to current recommendations of state and federal agencies, can be considered as an especially dangerous insecticide. Enormous quantities of this material have been used, much of it under conditions of considerable carelessness both from the viewpoint of the people applying sprays and dusts as well as from that of

the phenomenal number of animals that have been dipped, sprayed, or dusted. Despite such widespread use of DDT, cases of damage to humans, directly attributable to the use of this chemical, have been remarkably few, and these have been mostly cases of accidental or intentional ingestion of large quantities of DDT.

The chronic toxicity of DDT is sufficiently high that it appears desirable to limit to some extent, the exposure of the public to the residues of this insecticide. Since the most important area of exposure of the public (and especially infants and children) to DDT residues is by way of milk and milk products, the use of DDT on dairy animals and in dairy barns has now been strongly advised against. These contraindications for the use of DDT have provided considerable impetus for the development of replacement insecticides.

"Methoxychlor" is the approved common name for the dimethoxy analog of DDT. Its toxicity to flies and lice is essentially the same as DDT, and its length of residual action is also in a class with DDT. Its acute toxicity to mammals is only about 1/25th that of DDT and, more important, it apparently does not accumulate in body fats. These characteristics have made methoxychlor the insecticide of choice for use in dairy barns and on dairy animals.

"Lindane" is the approved common name for any formulation from essentially pure gamma isomer of benzene hexachloride. Crude benzene hexachloride consists of a mixture of five isomers as well as a small proportion of impurities consisting of closely related compounds. For all practical purposes

* Based on a talk given by the author before the Pharmaceutical Institute at Brookings, April 4, 1950.

the only insecticidally active part of this mixture is the gamma isomer. Crude benzene hexachloride has a strong, persistent, musty odor which is sufficiently objectionable that the usefulness of this highly effective insecticide has been seriously limited. It appears that the odor is due, not to the BHC isomers, but rather to the impurities. Lindane is an essentially odorless preparation. A further advantage that lindane has over crude BHC is that the beta isomer is eliminated. The beta isomer, like DDT, builds up in body fats, and is responsible for the undesirable chronic toxicity of crude BHC. The acute toxicity of lindane is sufficiently high (about twice that of DDT) that there has been some reluctance to recommend its promiscuous use on livestock. It has been recommended as a replacement for DDT in dairy barns but not on dairy animals. It has been recommended for use against swine mange and against lice on beef cattle.

Two closely related chlorinated organic insecticides that have been getting a considerable amount of attention from research entomologists have been given the common names "aldrin" and "dieldrin." Both of these materials have shown considerable promise against a wide variety of insects. Aldrin is being used commercially against the cotton boll weevil and will be used this year against grasshoppers by the Canadian Government. Dieldrin has shown a very high order of effectiveness against flies in barns. Neither of these insecticides have as yet been recommended for use in South Dakota.

An analog of chlordane, which has been given the common name "heptachlor," is being actively investigated. It has shown considerable promise against flies, ants, and a wide variety of other insect pests.

Nitroparaffin derivatives

The chlorinated organic compounds have not been the only chemicals considered as insecticides. A nitroparaffin derivative called "dilan" has been attracting considerable attention. This material, of apparently low mammalian toxicity and long residual action, has shown up very well against the Mexican bean beetle, many insect pests of potatoes, and a variety of other insects.

Organic phosphate insecticides

The organic phosphate insecticides have

been assuming increasing importance within the last few years. TEPP (sometimes referred to as TEP) is the abbreviated name for the insecticide, tetraethyl pyrophosphate. TEPP has been very useful against aphids of various species and against red spider mites. It hydrolyzes rapidly in the presence of traces of moisture, and its effective life after application is a matter of hours. There are circumstances when this sort residual action is of considerable advantage, as on food crops about to be harvested and when a toxic residue would be an undesirable contamination. TEPP has an exceedingly high acute toxicity to mammals, being of the order of 100 times that of DDT. Despite this high acute mammalian toxicity, however, TEPP has not as yet caused any notable difficulties to the processors and handlers of this insecticide.

Parathion is another organic phosphate insecticide. Its range of toxicity to insects is very great. It is being used for the control of various orchard pests, the European corn borer under certain circumstances, and various species of aphids, especially the greenbug in small grain. Parathion has some residual action over a period of a week or more. The acute toxicity of parathion to mammals, while a trifle less than TEPP, makes it the most dangerous insecticide to come into use in recent years. It has caused many cases of illness and some deaths among men engaged in the preparation of this insecticide, as well as among men engaged in applying it to crops. It is too good an insecticide to discard because of its toxicity, but the dangers connected with its use are so great that its use should be restricted to custom spray operators, either ground or air. Since there is considerable likelihood of another outbreak of greenbugs in small grain this year, large quantities of parathion may find use in South Dakota. Persons using this insecticide should wear protective clothing and respirators or full face masks, and should be thoroughly familiar with approved methods of application.

The most effective antidote to parathion poisoning is atropine, to the limit of the patient's tolerance (grains 1/60 to grains 1/30 every hour until pupils dilate). It is highly desirable that persons regularly using para-

thion obtain a prescription from a physician and keep a small supply of atropine on hand in case of emergency.

Several other organic phosphate insecticides are being actively investigated at present. The dimethyl analog of parathion ("metacide") shows considerable promise. It has a significantly lower acute toxicity to mammals than has parathion, and is apparently of comparable activity against many insects, including the greenbug. Another organic phosphate that may achieve prominence is ethyl p-nitrophenyl thionobenzene-phosphonate.

Plant products

Ryania is an insecticide obtained from the stems of the tropical American plant, *Ryania speciosa*. Its greatest present application in South Dakota is in connection with the control of the European corn borer. It has also been reported to be effective against the corn ear worm, the chinch bug, and the Mexican bean beetle. Ryania is a relatively stable material, and it has a low acute toxicity to mammals.

NEW TRENDS IN RESEARCH

Resistance

That insects could become resistant to insecticides has been known for over 35 years. Such resistance (or tolerance) has been studied in several species of scale insects, codling moth larvae, screw-worm larvae, and citrus thrips. DDT had not been in general use more than a few years when it became evident that many strains of houseflies were apparently becoming tolerant to DDT residues. Entomologists at the Orlando, Florida laboratory of the United States Department of Agriculture succeeded in developing, from a standard laboratory strain of flies, a strain that could tolerate many times the amount of DDT that was toxic to the parent colony. Since that time a large number of strains of DDT resistant flies have been discovered in the field or bred in the laboratory. Some of these strains are tolerant to thousands of times the quantity of DDT that affects normal houseflies.

The development of tolerance to DDT residues by some strains of houseflies has been accompanied frequently by an increase of tolerance to some, and in other cases to most other insecticides, though many strains are

specifically DDT resistant. Fly strains resistant to most of the insecticides in current use have been discovered or developed as laboratory colonies by research entomologists. Present evidence is that, once developed, resistance persists unchanged even in the absence of further exposure to insecticides.

Selective insecticides

One of the disadvantages of the usual manner of use of insecticides is the elimination of certain beneficial insects along with the noxious ones. Entomologists in Great Britain have been developing insecticides designed to kill certain insect pests without affecting the parasites and predators of these pests. An example of such a selective insecticide is a preparation of DDT in which the individual particles of insecticide are coated with a degraded cellulose so that the contact action of DDT is suppressed. Thus leaf feeding insects can still ingest a toxic dose of DDT without the parasites and predators of these pests being affected.

Systemic insecticides

Systemic insecticides are chemicals absorbed and translocated by plants (or animals) and which make the sap (or body fluids) toxic to insects. Such chemicals, when used in animals are generally referred to as drugs or chemotherapeutic agents. Some effort is being directed toward the development of chemotherapeutic agents for the control of cattle grubs. Considerable interest is now developing in a systemic insecticide called octamethylpyrophosphoramidate. This material can be sprayed on plants or added to the soil and thus made available to the root system. It is translocated and makes the sap toxic to sucking insects for long periods of time. In this case this systemic insecticide is also acting as a selective insecticide, as the parasites and predators of the sap sucking insects remain at least relatively unaffected.

FEDERAL HEARINGS

On January 17, 1950, the Food and Drug Administration opened a hearing on tolerances for poisonous and deleterious substances on or in fresh fruits and vegetables. The scope of this hearing is extremely broad, including testimony on necessity for use, methods of analysis of toxic residues on and in fruits and vegetables, comparable effectiveness of different insecticides of varying

mammalian toxicity, etc. As of the end of March, over 5,000 pages of testimony had been taken from federal, state, and commercial representatives as well as from farmers and other interested parties. The hearing is apparently being conducted with considerable efficiency, and the amount of data being presented for consideration is phenomenal. The task of evaluating and summarizing the voluminous testimony is an enormous one. The final outcome of this hearing is expected to have far reaching effects on the development, sale, and use of insecticides and fungicides.

PHARMACEUTICAL ASSOCIATION CONVENTION

Well over three hundred persons attended the Sixty-Fourth Annual Convention of the South Dakota State Pharmaceutical Association in Sioux Falls on June 13, 14, and 15, 1950.

The Honorable Henry B. Saure, Mayor of Sioux Falls, welcomed South Dakota Pharmacists and their families at the opening session on Tuesday forenoon. He offered the facilities of South Dakota's largest city for our entertainment during our three day meeting, and wished us a profitable and enjoyable convention.

Tribute was paid to twelve South Dakota Pharmacists who passed away since our last annual meeting in a Memorial Hour conducted by Pharmacist Albert Kohler. The Reverend Maurice Wessman spoke in memory of our departed members.

Reports on the activities of the Pharmaceutical Association and the State Board of Pharmacy were given at the opening business session. Recommendations in the address of President John H. Sidle included the establishment of a Commercial and Legislative Section for the purpose of raising funds, by membership fees in such section, to carry on legislative lobbying and give commercial services in the interests of the drug trade in this state. A resolution creating such a section was adopted at this convention and tentative organization was authorized by the adoption of the Report of a Special Organization Committee appointed by the President. The newly established Section is intended to

eliminate the use of "tax monies" for legislative and commercial purposes.

The Brown Drug Company of Sioux Falls entertained the conventioners with a barbecue dinner held at the Izaak Walton League Club House on Tuesday afternoon. "Rush" and "Dick" Brown were highly complimented for the delicious food and drink served to a capacity crowd. Sports for men and ladies followed the barbecue dinner.

The program of entertainment continued on Tuesday evening at the Minnehaha Country Club where the Allied Drug Travelers entertained the visitors from 7:00 P. M. until the wee hours of the morning. Buffet Luncheon was served from 8 to 10 P. M. Many pharmacists from surrounding towns come in for the evening's entertainment and enjoyed fellowship with those who had come from the far corners of our state. It was really a "Grand Party" and the Travelers were complimented highly.

The splendid attendance at both the forenoon and afternoon sessions on Wednesday demonstrated that South Dakota Pharmacists are interested in the professional and commercial aspects of the drug business. Outstanding convention speakers were on the program from 9:30 a. m. until 6:00 p. m. Wednesday's speakers included **John C. Foster**, Executive Secretary of the South Dakota Medical Association, **W. N. Stebbins** of Sharpe & Dohme who gave valuable information on the Animal Health Departments in drug stores, **Dr. E. R. Serles** of the University of Illinois who returned to his home state and inspired his many friends in his address about Pharmacists of the Future. **L. S. Flanedy** of Parke Davis & Company in his address "Back Room Conversation," **Claudie L. Smith** of McKesson & Robbins who gave an illustrated report on the physical layout of a drug store and the financial returns to be expected from modernized operations, **J. W. Landsdowne** of Eli Lilly and Company who encouraged pharmacists to operate their business by survey guides rather than by guessing, and **Frank W. Moudry**, President of the National Association of Retail Druggists who told of the activities of this national organization and how it is operating to help the independent druggists of America. **Dr. Floyd J. LeBlanc** exchanged speaking time with President Frank Moudry so that he might con-

tinue with a crowded speaking schedule ahead. Mr. Moudry had requested a Thursday morning appearance but arrived from the Massachusetts convention in time to speak to us on Wednesday afternoon.

Officers elected for the ensuing year were: **LaVerne J. Mowell**, Murdo, President; **Albert O. Bittner**, Aberdeen, First Vice-President; **J. Chandler Shirley**, Brookings, Second Vice-President; **Neil E. Fuller**, Chamberlain, Third Vice-President; **Charles F. Van De Walle**, Sioux Falls, Fourth Vice-President and **Frank S. Bockoven**, Clark, Treasurer. The Association named **Floyd M. Cornwell**, Webster; **Alger D. Knutson**, and **Clark and Andy E. Paulson**, Clear Lake, as practicing pharmacists to be recommended to Governor George T. Mickelson as qualified for appointment to membership on the State Board of Pharmacy.

Watertown was voted to be the host city to the South Dakota Pharmaceutical Association in 1951.

BOARD OF PHARMACY CONDUCT EXAMINATIONS

The members of the South Dakota Board of Pharmacy conducted examinations for licensure at Brookings on June 6, 7, 8, 1950. The largest class of candidates ever to be examined by the Board of Pharmacy appeared at this meeting.

Pharmacy college graduates who had not completed their one year of practical experience and who were examined only in the written subjects of Pharmacy, Materia Medica, Pharmaceutical & Chemical Mathematics and Chemistry were: Sidney E. Anderson, Owen G. Benthin, William M. Briley, Dan D. Christensen, Charles M. Dietz, Elton H. Ferguson, Morton E. Freeman, Lonita Joyce Gustad, Don C. Haney, James R. Heiertz, Carl C. Johnson, Loren K. Johnson, Jean Marie Levine, Colletta Jane Lines, Darrell B. Nelson, Mrs. Ardith Gene Olson, Carol J. Olson, Thomas H. Overton, Ronald P. Park, Rowland J. Roberts, Orville A. Rohlck, Leo James Scherman, JoAnn M. Starksen, Milton S. Swenson, Bernard W. Tennyson, Keith E. Verthein, Kenneth R. Verthein, Floyd A. Wilkening and Kenneth A. Yunker.

Candidates who received their Bachelor of

Science Degree in Pharmacy this year and who had completed their practical experience of one year, or more, were examined in the written subjects mentioned in the above paragraph and also the subjects of Practical, Oral and Identification. This group includes: A. Eugene Anderson, Burdette C. Anderson, Norma Mae Aspen, Dale Auchampach, Donald C. Barr, James E. Baumbach, David Luther Breen, Robert D. DeKraay, Robert M. Eickman, Walter B. Fellows, John P. Haley, Elial P. Harr, D. James Hazledine, Dwight William Hustead, James Harvey Jones, Donald W. Knutson, William Carl Moe, Roger D. Molstad, George F. Nelson, Howard E. Nepp, Bernard J. Rammer, Velma May Roberts, Carr Lynn Ross, Laura Elizabeth Schoenrogge, Bertil E. Swenson, Thomas P. Tabor, Daune E. Tupper and John R. Vander Aarde.

Candidates who received their Bachelor of Science Degree in Pharmacy in 1949 and who were eligible to complete the examination requirements for licensure at this meeting were: Alvin G. Determan, Raymond A. Engler, Albert Jolink, Robert F. Jones, Lloyd D. Knutson, Roger L. Koenig, Leonard P. Martens, James E. Miller, Lueman B. Rodman, William M. Ryan, Ernest A. Schneider, Gerald E. Smith, Earl LeRoy Zeal, Thomas B. Harris and Mrs. Mary Lou Schuelke.

Leonard Roudebush of Custer, South Dakota and George Isaac Tibbs of Rapid City appeared at this examinations meeting for final consideration of their NABP Applications from Wyoming and Nebraska respectively. Both of these applications were approved and licentiate certificates granted.

EXECUTIVE COMMITTEE OF S. D. PH. A. NAME ASSOCIATE EDITOR FOR JOURNAL

Charles F. Van De Walle newly elected officer of the South Dakota Pharmaceutical Association has been named by the Executive Committee as Associate Editor for the Pharmaceutical Section of the South Dakota Journal of Medicine and Pharmacy.

Mr. Van De Walle will appoint representative pharmacists from South Dakota's leading cities to be responsible to him for news items of interest to pharmacists which occur in their communities. Pharmacists from any town or

city in the state should send material for the Journal directly to Charles F. Van de Walle, Associate Editor, South Dakota Journal of Medicine and Pharmacy, 513 South Main Avenue, Sioux Falls, South Dakota.

THE PUBLIC'S HEALTH—YOUR FIRST CONCERN

HEART DISEASE AND THE LIFE SPAN

Every year, despite a lengthening life span, heart disease is taking an increasing toll of those under 65. As a result of the strides made by medical science in the past four decades in bringing under control the infectious menaces such as typhoid, tuberculosis, and the childhood diseases, formerly outstanding killers, the average life expectancy has been increased from 49 years in 1900 to that of 67 years today. Yet each year about 250,000 persons die **before** reaching age 67 — as a result of heart disease.

Implicit in the longer life now promised the average individual is that more years of usefulness are required today of his heart than was the case in times past. A new emphasis is needed on conserving the vigor and "staying power" of life's vital pump.

A large number of the deaths due to heart disease, particularly in early and middle adult life, **are** preventable. While degenerative heart disease is a hazard of old age and is impossible to prevent entirely, much can be done to postpone its onset and to slow down its progress among those in the middle-aged and younger groups who constantly are adding to the growing number of cardiac cases.

Early discovery is of the greatest importance, implying not only prompt institution of therapy, but often the alteration of a too strenuous pace of life in time to prevent serious damage to a heart already beginning to grasp from its overload. Early steps to reduce weight in obese persons may be necessary in order to relieve the added burden placed upon the heart by excess weight.

Since so much of the value of treatment of heart disease depends upon the patient himself, an informed public must be the basis for an intelligent approach to the problem of the individual and the community. In this the pharmacist is a valuable ally of the physician,

not only in getting a patient to a doctor, but as a source of reliable information to the community, since it is to the pharmacist that people often turn first with their complaints.

Treatment of heart disease is not one but a number of problems, based on the type of heart disease. The causes and the conditions of these types vary, but their effects are the same — all sap the endurance power of the heart. In the search for cure the problems are being dealt with on broad fronts — by surgery, diet, drugs, antibiotics, and even by psychotherapy.

As a result of modern surgical pioneering, the scalpel — on the tip of a surgeon's finger — is now probing the heart itself to correct the ravages of rheumatic fever and the malformations of congenital defects, both important causes of crippling heart disease.

Similar advances are being made by chemotherapy. Sulfa drugs are forestalling rheumatic fever and preventing damage to delicate heart valves. Penicillin is curing 70 to 75 percent of cases of bacterial endocarditis which formerly were 99 percent fatal. New drugs are being used to reduce blood pressures that have reached dangerous heights. Dicumarol and heparin, by lowering the clotting ability of the blood, are reducing the complications that follow a coronary attack.

Medical science is thus actively taking up the challenge posed by heart disease. With an increasing fund of knowledge resulting from added support for research, medical science is mapping out new areas of prevention, treatment and cure. But along with an increased life span and the promise of even more research progress yet to come, an important responsibility still rests with the individual: This is to be alert in bringing symptoms to the attention of a physician **early**. In this chain of communication the pharmacist plays an important and vital role.

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PRESIDENT'S PAGE

AUGUST MESSAGE

Doctors often tell their patients to slow up or they may fold up. We also laugh at the Irishman who, when ordered "Money or your life," said, "Take me loife; Oi'm savin' me money fer me auld age."

Too many of us are saving up, money and liesure relaxation, for an old age that we may never attain. One characteristic of a medical practice is that we are never "off duty" so long as we are within reach of our patients. We eat, sleep, work, go to lodge, church or theatre with one ear tuned for the telephone. There is no "end of the day" or free week-end for us unless we do actually get out of reach of our patients. This feeling is not for the money involved nearly as much as it is for the feeling of obligation we have for our patients. We feel that someone might need us, and so are living constantly under tension and fully "wound up."

We owe it to ourselves and to our patients to relax and getting unwound at not infrequent intervals. We can do better work for them when we are refreshed and renewed by some time off from the demands of that telephone bell, whether it be by attending a scientific session somewhere, or by going fishing. Mental work is more fun to a rested mind, and the results are better. And what's more, you will probably live longer. Look at the obituary pages of the AMA Journal and note the ages of death and the number of them that are coronary.

It is time for us to wake up to the fact that we are individually our own best patients, and to treat ourselves somewhat like our other patients are treated. Perscribe for yourself an absorbing hobby into which to escape your tension, and rest in the form of attending meetings and taking vacations at frequent intervals.

And, Oh yes, make that annual contribution to the Endowment Fund Corporation for making our medical school the best in the country. Why not send in a dollar per year of your practicing, and repeat that annually? Send your checks to Johnny Foster, First National Bank Bldg. in Sioux Falls. It is deductable, you know.

Transactions of the South Dakota State Medical Association

Sixty-Ninth Annual Session
Huron, South Dakota
May 21-23, 1950

OFFICERS, 1950-51

President	
C. E. Robbins, M.D., (Resigned)	Pierre
L. J. Pankow, M.D.	Sioux Falls
President-Elect	
D. A. Gregory, M.D.	Milbank
Vice-President	
R. E. Jernstrom, M.D.	Rapid City
Secretary-Treasurer	
R. G. Mayer, M.D.	Aberdeen
Executive Secretary	
John C. Foster	Sioux Falls
A. M. A. Delegate & Speaker, House	
H. Russell Brown, M.D.	Watertown
Alternate Delegate to A. M. A.	
William Duncan, M.D.	Webster
Chairman of Council	
G. E. Whitson, M.D.	Madison

COUNCILORS

First District (Aberdeen)	
J. D. Alway, M.D. (1953)	Aberdeen
Second District (Watertown)	
Rodney Stoltz, M.D. (1953)	Watertown
Third District (Madison)	
G. E. Whitson, M.D. (1951)	Madison
Fourth District (Pierre)	
M. M. Morrissey, M.D. (1953)	Pierre
Fifth District (Huron)	
B. T. Lenz, M.D. (1951)	Huron
Sixth District (Mitchell)	
F. D. Gillis, M.D. (1951)	Mitchell
Seventh District (Sioux Falls)	
R. E. Van Demark, M.D. (1951)	Sioux Falls
Eighth District (Yankton)	
A. P. Reding, M.D. (1953)	Marion
Ninth District (Black Hills)	
(To Be Named) (1952)	Rapid City
Tenth District (Rosebud)	
R. J. Quinn, M.D. (1952)	Burke
Eleventh District (Northwest)	
A. W. Spiry, M.D. (1952)	Mobridge
Twelfth District (Whetstone Valley)	
F. F. Pfister, M.D. (1953)	Webster
Councilor at Large	
W. H. Saxton, M.D. (1951)	Huron
Delegate to A. M. A.	
H. Russell Brown, M.D.	Watertown

STANDING COMMITTEES — 1950-51

Scientific Work	
L. J. Pankow, M.D.	Sioux Falls, Chr.
D. A. Gregory, M.D.	Milbank
R. G. Mayer, M.D.	Aberdeen

Public Policy & Legislation

L. J. Pankow, M.D.	Sioux Falls, Chr.
D. A. Gregory, M.D.	Milbank
The Council	

Publications

R. G. Mayer, M.D.	Aberdeen, Chr.
D. H. Manning, M.D.	Sioux Falls
D. Slaughter, M.D.	Vermillion

Medical Defense

F. D. Gillis, M.D. (1951)	Mitchell, Chr.
M. W. Pangburn, M.D. (1952)	Miller
E. H. Brock, M.D. (1953)	Rapid City

Medical Education & Hospitals

W. H. Saxton, M.D. (1951)	Huron
R. A. Buchanan, M.D. (1952)	Huron
Wayne Geib, M.D. (1953)	Rapid City, Chr.

Medical Economics

C. R. Stoltz, M.D. (1951)	Watertown, Chr.
M. C. Tank, M.D. (1952)	Brookings
P. R. Scallin, M.D. (1953)	Redfield

Necrology

G. E. Whitson, M.D. (1951)	Madison, Chr.
R. A. Weber, M.D. (1952)	Mitchell
J. A. Lowe, M.D. (1953)	Mobridge

Public Health

G. J. Van Heuvelen, M.D.	Pierre, Chr.
The Council	

Subcommittee on Cancer

D. H. Breit, M.D. (1951)	Sioux Falls
Hans Jacoby, M.D. (1952)	Huron
P. V. McCarthy, M.D. (1954)	Aberdeen, Chr.
R. L. Ferguson, M.D. (1953)	Vermillion

Subcommittee on Tuberculosis

W. L. Meyer, M.D. (1951)	Sanator, Chr.
W. T. Judge, M.D. (1953)	Milbank
D. S. Baughman, M.D. (1952)	Madison

Subcommittee on Maternal & Child Welfare

G. E. Zimmerman, M.D. (1952)	Sioux Falls, Chr.
R. E. Van Demark, M.D. (1951)	Sioux Falls
Mary Schmidt, M.D. (1953)	Watertown

Diabetes

B. T. Lenz, M.D. (1951)	Huron, Chr.
J. W. Donahoe, M.D. (1952)	Sioux Falls
I. L. Schuchardt, M.D. (1953)	Aberdeen

Mental Health

F. D. Gillis, M.D. (1951)	Mitchell, Chr.
R. J. Quinn, M.D. (1952)	Burke
V. V. Volin, M.D. (1953)	Sioux Falls

Rheumatic Fever & Heart Disease

T. H. Sattler, M.D. (1951)	Yankton, Chr.
M. P. Merryman, M.D. (1952)	Rapid City
J. W. Argabrite, M.D. (1953)	Watertown

Medical Benevolence

C. E. Sherwood, M.D. (1953)	Madison, Chr.
Wm. Donahoe, M.D. (1952)	Sioux Falls
J. C. Hagin, M.D. (1951)	Miller

SPECIAL COMMITTEES — 1950-51

Radio Broadcast

J. C. Rodine, M.D.	Aberdeen, Chr.
Paul Reagan, M.D.	Sioux Falls
Donald Fedt, M.D.	Watertown
L. C. Askwig, M.D.	Pierre
R. A. Buchanan, M.D.	Huron
Harvard Lewis, M.D.	Mitchell

V. I. Lacy, M.D. _____ Yankton
A. A. Lampert, M.D. _____ Rapid City

Editorial

R. G. Mayer, M.D. _____ Aberdeen, Chr.
Donald Slaughter, M.D. _____ Vermillion
Wray Tomlinson, M.D. _____ Mitchell
C. B. McVay, M.D. _____ Yankton
G. J. Van Heuvelen, M.D. _____ Pierre
W. H. Karlins, M.D. _____ Webster
A. P. Peeke, M.D. _____ Volga
G. R. Bartron, M.D. _____ Watertown
Paul Tschetter, M.D. _____ Huron
H. J. Hare, M.D. _____ Rapid City
D. H. Manning, M.D. _____ Sioux Falls
J. W. O'Brien, M.D. _____ Winner
G. C. Torkildson, M.D. _____ McLaughlin

Medical Licensure

Lyle Hare, M.D. _____ Spearfish
J. D. Alway, M.D. _____ Aberdeen
F. F. Pfister, M.D. _____ Webster

Veterans Administration and Military Service

L. C. Askwig, M.D. _____ Pierre, Chr.
D. H. Manning, M.D. _____ Sioux Falls
M. R. Gelber, M.D. _____ Aberdeen
F. F. Pfister, M.D. _____ Webster
T. J. Billion, Jr., M.D. _____ Sioux Falls

Spafford Memorial Fund

J. C. Ohlmacher, M.D. _____ Vermillion

Prepayment and Insurance Plans

C. E. Sherwood, M.D. _____ Madison, Chr.
T. W. Reul, M.D. _____ Watertown
R. E. Jernstrom, M.D. _____ Rapid City
R. G. Mayer, M.D. _____ Aberdeen
C. J. McDonald, M.D. _____ Sioux Falls
B. R. Skogmo, M.D. _____ Mitchell
F. T. Younker, M.D. _____ Sisseton

National Legislation

L. J. Pankow, M.D. _____ Sioux Falls, Chr.
D. A. Gregory, M.D. _____ Milbank
R. E. Jernstrom, M.D. _____ Rapid City
R. G. Mayer, M.D. _____ Aberdeen
H. R. Brown, M.D. _____ Watertown

Rural Medical Service

A. P. Peeke, M.D. _____ Volga, Chr.
M. M. Morrissey, M.D. _____ Pierre
G. J. Bloemendaal, M.D. _____ Ipswich

Medical School Affairs

Donald Slaughter, M.D. _____ Vermillion
L. J. Pankow, M.D. _____ Sioux Falls
Wm. Saxton, M.D. _____ Huron
F. R. Williams, M.D. _____ Rapid City
H. Russell Brown, M.D. _____ Watertown
C. B. McVay, M.D. _____ Yankton

Nursing Training

W. H. Saxton, M.D. _____ Huron, Chr.
L. J. Pankow, M.D. _____ Sioux Falls
E. C. Bobb, M.D. _____ Mitchell

Workman's Compensation

R. E. VanDemark, M.D. _____ Sioux Falls, Chr.
O. S. Randall, M.D. _____ Watertown
R. J. Delaney, M.D. _____ Mitchell

Liason Committee with S. B. H.

W. A. Geib, M.D. _____ Rapid City, Chr.
D. H. Breit, M.D. _____ Sioux Falls
C. L. Vogeles, M.D. _____ Aberdeen

SUBCOMMITTEES OF THE COUNCIL**Special Legislative Subcommittee of the Council on Legislation**

M. M. Morrissey, M.D. _____ Pierre, Chr.
L. J. Pankow, M.D. _____ Sioux Falls
D. A. Gregory, M.D. _____ Milbank

Auditing & Appropriations Committee**Committee of Councillors**

F. D. Gillis, M.D. _____ Mitchell, Chr.
R. E. VanDemark, M.D. _____ Sioux Falls
M. M. Morrissey, M.D. _____ Pierre

ANNUAL MEETING OF THE COUNCIL OF THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION**First Session, Saturday, May 20, 1950**

The first meeting of the Council was called to order at 8:00 p. m. in the Marvin Hughitt Hotel by the Chairman, Dr. D. A. Gregory, Milbank. On roll call the following were present: - President W. H. Saxton, Huron; Vice President L. J. Pankow, Sioux Falls; Secretary-Treasurer R. G. Mayer, Aberdeen; Executive Secretary John C. Foster, Sioux Falls; Speaker of the House of Delegates H. Russell Brown, Watertown; Councilors J. D. Alway, Aberdeen; G. E. Whitson, Madison; M. M. Morrissey, Pierre; B. T. Lenz, Huron; F. D. Gillis, Mitchell; R. E. Van Demark, Sioux Falls; E. M. Stanbury, Vermillion; R. E. Jernstrom, Rapid City; D. A. Gregory, Milbank; J. L. Calene, Aberdeen. The Chairman announced that a quorum was present.

Since the minutes of the previous session had been published in the Journal, a motion was made by Gillis, seconded by Saxton, and carried that the reading of the minutes be dispensed with. Executive Secretary Foster discussed the contract with Veterans Administration regarding home-town care of veterans. A motion made by Stansbury, seconded by Whitson, and carried that the present contract be continued. The Chairman read the report of the council to be presented to the House of Delegates, and a motion was made by Gillis, seconded by Stansbury, and carried that the report be adopted.

The report of the Committee on Auditing and Appropriations was presented, including the audit of the accounts of the Executive Secretary, the Secretary-Treasurer and the budget for 1950-51. A motion was made by Pankow, seconded by Alway, and carried that the audit of the Executive Secretary's Accounts be accepted. A motion was made by Pankow, seconded by Whitson, and carried that the Budget be adopted. A motion was made by Jernstrom, seconded by Stansbury, and carried that the Treasurer's report be accepted as read. Dr. Mayer read his annual report as Secretary. A motion was made, seconded and carried that the report be accepted.

A lengthy discussion of the Basic Science Law followed. Three members of the Basic Science Board, Dr. J. D. Alway, Aberdeen; Walter Hard, Vermillion; and Gregg Evans, Yankton, were present and led the discussion, which was also participated in by Drs. Pankow, Saxton, Slaughter, Stansbury and Brown. Following the discussion a motion was made by Brown, seconded by Pankow, and carried that the new Legislative Committee investigate and study methods of improving and amending the Basic Science Law and report to the Council not later than the fall meeting of the council. Councilor reports were then heard from Aberdeen, Watertown, Madison, Mitchell, Sioux Falls, Black Hills and Whetstone Valley Districts. Dr. Pankow gave his report as Vice-President, and the Executive Secretary, John C. Foster, gave his annual report. A motion was made by Whitson, seconded by Stansbury and carried that all of the

above-mentioned reports be accepted.

Dr. Whitson presented his report regarding the establishment of a Grievance Committee. A motion was made by Whitson, seconded by Alway, that a Grievance Committee be established. An amendment was made by Brown and seconded by Calene that the Grievance Committee be a standing Committee. After considerable discussion the motion was amended and passed. A motion was made by Pankow, seconded by Whitson and carried that the chairman of the council recommend the following amendment to the By-Laws creating a Grievance Committee and that this be introduced to the House of Delegates as a recommendation of the Council.

"Amendment to the Chapter VII of the By-Laws"

Section 1.

Insert after words, "Committee on Diabetes" the words "Executive Committee".

Add New Section 13

The executive committee shall consist of the President, President-Elect, Vice-President, Secretary-Treasurer, Speaker of the House and Chairman of the Council. Its duties shall be to be advisory in nature to the various officers and committees when indicated, and it shall function when asked to do so by any one of them. It shall also have other functions as delegated from time to time by the House of Delegates or by the council.

Dr. Brown and Foster led a discussion on the promotion of Health Councils in the various districts. Foster discussed the New Jersey Plan for improving medical service and a motion was made by Alway, seconded by Stansbury, and carried that the Delegate to the A. M. A. act according to his best judgment at the A. M. A. Convention. On motion the meeting adjourned at 10:30 p. m.

R. G. Mayer, M.D., Secretary

Second Session, May 22, 1950

The second meeting of the Council was called to order by Dr. D. A. Gregory, Chairman, at 9:40 p. m. Present were W. H. Saxton, Huron; L. J. Pankow, Sioux Falls; D. A. Gregory, Milbank; R. G. Mayer, Aberdeen; R. E. Van Demark, Sioux Falls; G. E. Whitson, Madsion; F. D. Gillis, Mitchell; A. P. Reding, Marion; R. E. Jernstrom, Rapid City; H. Russell Brown, Watertown; John C. Foster, Sioux Falls; J. D. Alway, Aberdeen; M. M. Morrissey, Pierre.

Dr. Saxton moved that the reading of the minutes of the last meeting be dispensed with. Dr. Whitson seconded the motion and it was carried.

Dr. Gregory called for nominations from the floor for the office of Chairman of the Council. Dr. Saxton nominated Dr. Whitson, Dr. Pankow moved that the nominations be closed and that the secretary be instructed to cast a unanimous ballot for Dr. Whitson. Dr. Brown seconded the motion and it was carried.

Dr. Gregory then called for nominations for Editor of the Journal. Dr. Saxton moved that Dr. Mayer continue as editor. Seconded by Dr. Whitson, and carried. The same staff is to be continued

also.

Dr. Whitson then called for nominations for the Committee on Auditing and Appropriations. Dr. Pankow nominated Dr. Gillis, Dr. Van Demark, Dr. Morrissey. Dr. Jernstrom seconded the motion and Dr. Gregory moved that the nominations cease and that a unanimous ballot be cast by the Secretary. Seconded by Dr. Jernstrom, and carried.

Dr. Mayer suggested that the executive office send each Executive Committee member the financial report each month.

Mr. Foster gave brief summary of a letter from the National Society for Medical Research concerning a contribution from the South Dakota State Medical Association. Dr. Morrissey moved to contribute the usual \$50.00, seconded by Jernstrom and carried.

Dr. Pankow moved that Karl Goldsmith be instructed to draw up such legislation as needed for medical research at the University of South Dakota Medical School. Seconded by Dr. Gregory and carried.

Dr. Mayer brought up the subject of Workman's Compensation as referred to the Council by the House of Delegates. Dr. Jernstrom moved that the matter of Workman's Compensation be referred to Karl Goldsmith and legislation drawn up for the legislative session, seconded by Dr. Pankow and carried. Dr. Alway moved the creation of a special sub-committee on Legislation including Karl Goldsmith, the President, President-Elect and Dr. Morrissey. Seconded by Dr. Jernstrom and carried.

Dr. Pankow moved that action be taken to recover any money from the State of South Dakota which was duly accrued to the old Board of Medical Examiners. Seconded by Dr. Gillis and carried.

Dr. Saxton moved that each Councilor poll his District and get their reaction to the annual registration fee and present it at the Council meeting in September. Seconded by Dr. Jernstrom and carried.

Dr. Brown moved that the Special Legislative Committee lay the ground work for passing legislation at the next session of the State legislature, urging Congress to oppose Compulsory Health Insurance. Seconded by Dr. Jernstrom and carried.

Dr. Jernstrom moved the referral of a resolution to make all coroners Doctors of Medicine to the legislative sub-committee. Seconded by Dr. Reding and carried.

Dr. Pankow moved that the Council recommend that the name of the South Dakota State Board of Medical and Osteopathic Examiners be changed to "South Dakota State Board of Examiners in Medical Sciences", seconded by Dr. Brown, carried.

Dr. Gregory moved that the report of the committee on Veterans Administration and Military Affairs be tabled for further study. Seconded by Dr. Van Demark and carried.

The resignation of the President of the Association, Dr. C. E. Robbins, was read by Dr. Mayer. Dr. Gregory moved that we accept the resignation with utmost regret. Seconded by Dr. Gillis and carried.

Dr. Saxton moved that Dr. Gregory be elevated to the position of President-Elect, seconded by Dr. Van Demark and carried.

Dr. Saxton moved, in compliance with the desire of the House of Delegates, that Dr. Jernstrom be appointed by the Council to position of Vice-President. Seconded by Dr. Morrissey and carried.

Dr. Gregory then resigned as Councilor from the 12th District and suggested the appointment of Dr. F. F. Pfister. Dr. Pankow moved that we accept the resignation of Dr. Gregory and appoint Dr. Pfister as Councilor. Seconded by Dr. Gillis and carried.

Dr. Jernstrom resigned as Councilor from the 9th District. Dr. Pankow moved that we accept the resignation, seconded by Dr. Gillis and carried. The new councilor from the 9th District will be presented at the next Council meeting in September.

Dr. Alway moved that the President appoint a special committee as mentioned in the resolution from the South Dakota Society of Pathologists. Seconded by Dr. Brown and carried. The resolution reads as follows:

We, the South Dakota Society of Pathologists, do hereby request the South Dakota State Medical Association to appoint a special liaison committee from the members of the South Dakota State Medical Association to serve and consult with the Division of Laboratories, State Department of Health, in regard to present and future services offered by the Division of Laboratories.

Dr. Pankow suggested that in the future the President-Elect have a meeting prior to the Annual Meeting so that Committee appointments can be made and included in the minutes.

Dr. Pankow moved to invite North Dakota to hold a joint meeting at Aberdeen in 1951 to celebrate the 70th anniversary of organized medicine in the Dakotas, seconded by Dr. Jernstrom and carried.

Dr. Reding moved adjournment, seconded by Dr. Gillis and carried.

Adjourned at 11:15 p. m.

R. G. Mayer, M. D., Secretary

PROCEEDINGS OF THE 69th ANNUAL MEETING OF THE HOUSE OF DELEGATES

SOUTH DAKOTA STATE MEDICAL ASSOCIATION

Huron, S. D.

First Session, Sunday, May 21, 1950

The first meeting of the House of Delegates was called to order at 1:40 p. m. in the Hotel Marvin Hughitt, Sunday, May 21st, Dr. H. Russell Brown, Speaker of the House, presiding. The Secretary called the roll, with the following present: officers, W. H. Saxton, L. J. Pankow, R. G. Mayer, H. Russell Brown, D. A. Gregory. Councilors: J. D. Alway, G. E. Whitson, M. M. Morrissey, B. T. Lenz, F. D. Gillis, R. E. Van Demark, E. M. Stansbury, R. E. Jernstrom, A. W. Spiry, J. L. Calene and D. A.

Gregory. Delegates present were: J. C. Rodine, P. R. Scallin, Aberdeen District; T. W. Reul, Watertown District; C. E. Sherwood, Madison-Brookings District; L. C. Askwig, Pierre District; B. R. Skogmo, Mitchell District; G. A. Stevens, D. H. Manning, J. A. Kittelson and C. J. McDonald, Sioux Falls District; A. P. Reding and E. R. Schwartz, Yankton District; W. Gieb and Lyle Hare, Black Hills District; F. Pfister, Whetstone Valley District and the Speaker announced that a quorum was present.

G. E. Whitson read and D. H. Manning seconded a motion that the reading of the 1949 minutes be dispensed with due the fact that they had been published in the August issue of the Journal, carried.

President W. H. Saxton then read his Presidential address. Speaker Brown introduced a special guest Dr. James Sargent of Milwaukee, Wis., who spoke briefly.

Dr. Saxton appointed the Committee on Nominations as follows: Lyle Hare, Spearfish, Chairman; F. F. Pfister, Webster; C. J. McDonald, Sioux Falls; L. C. Askwig, Pierre; J. L. Calene, Aberdeen; T. W. Reul, Watertown; C. E. Sherwood, Madison; B. R. Skogmo, Mitchell; Donald L. Slaughter, Vermillion; B. T. Lenz, Huron; A. W. Spiry, Mobridge.

Committees were then appointed by Speaker Brown to act as reference committees as follows: Committee on Credentials—E. M. Stansbury, Vermillion; B. T. Lenz, Huron, C. E. Sherwood, Madison.

Committee on Report of Officers—G. A. Stevens, Sioux Falls, M. M. Morrissey, Pierre, Lyle Hare, Spearfish.

Committee on Amendments to the Constitution and By-Laws—F. Pfister, Webster, G. E. Whitson, Madison, C. J. McDonald, Sioux Falls.

Committee on Resolutions and Memorials—F. D. Gillis, Mitchell, Paul Tschetter, Huron, P. R. Scallin, Redfield.

Committee on Standing Committees—L. C. Askwig, Pierre, W. Gieb, Rapid City, D. H. Manning, Sioux Falls.

Committee on Special Committees and Miscellaneous Business—R. E. Van Demark, Sioux Falls, T. W. Reul, Watertown, J. C. Rodine, Aberdeen. The report of the President was not read because it was printed in the mimeographed Committee Hand Book in the hands of the Delegates.

As a supplement to his report Dr. Saxton stated that he had served on the Executive Committee of the State Nursing Survey and that the problem of nursing education is becoming increasingly difficult to handle. He recommended that his successor make every effort to work with the nursing group towards satisfactory solution.

Dr. Pankow then gave the report of the Vice-President. Dr. Mayer read his report as Secretary-Treasurer and Mr. Foster read his report as Executive Secretary. Dr. Gregory read the report of the Council to the House of Delegates. The report of the Delegate to the A. M. A. Annual and Interim Sessions was not read because these reports had

been published in the Journal. A motion to wave the reports was made by C. J. McDonald, seconded by E. M. Stansbury, and carried.

Reports of the Councilors from all Districts, with the exception of Rosebud and Northwest Districts were read. All of the reports of the Officers and Councilors were referred to the Reference Committee on Reports of Officers, except for that portion of the Secretary's report referring to the Convention City for 1951, which was referred to the Committee on Nominations. The reports of the following Standing Committees were not read because they had been mimeographed in advance for the delegates, Public Policy and Legislation; Publications; Medical Education and Hospitals; Necrology; Public Health; Diabetes, Mental Health, Rheumatic Fever and Heart Disease and Medical Benevolence. Reports of the Committee on Medical Defense and Medical Economics were not submitted.

Dr. W. H. Saxton, Chairman of the Committee on Scientific work presented the Annual Meeting Program as the activity of the Committee. All of the Standing Committees were referred to the Reference Committee on Standing Committees. The reports of the following Special Committees were not read because they had been mimeographed in advance for the delegates: Radio Broadcast; Editorial; Medical Licensure, Veteran's Administration and Military Service; Spafford Memorial Fund; Prepayment and Insurance Plans; Medical School Affairs; National Legislation; Rural Medical Service. Dr. Slaughter, Chairman of the Medical School Affairs Committee, supplemented his report with the recommendations that the Committee should be made a Standing Committee, and that unified effort should be made in requesting funds for Medical School operation in the forthcoming session of the legislature. The report was further supplemented by Dr. Pankow who added the name of Pierce McDowell of Sioux Falls to the list of Directors of the Medical School Endowment Association.

Dr. Gregory, Chairman of the Committee on Nursing Training, read his report as did Dr. Pankow, Chairman of the Committee on Workman's Compensation. The reports of these Special Committees were referred to the Reference Committee on Special Committees and Miscellaneous Business. Mr. Foster read the report of the Auditing and Appropriations Committee. On motion, this report was referred to the Reference Committee on Reports of Standing Committees.

Old Business: There was no old business.

New Business: Dr. Gregory read a proposed amendment to the By-Laws which would provide for an Executive Committee and then a proposal to create a Grievance Committee. The Chairman of the Special Committee to investigate the inauguration of a Grievance Committee, G. E. Whitson, read the report of that Committee recommending the creation of such a body. A general discussion followed. Dr. Brown referred the recommendation to the Reference Committee on Special Committees and Miscellaneous Business.

Dr. Schwartz introduced a resolution from the Yankton District, recommending that Dr. A. P. Reding be named Councilor from the Yankton District to replace Dr. E. M. Stansbury. The recommendation was referred to the Committee on Nominations. Dr. T. W. Reul introduced a recommendation from the Watertown District suggesting that Doctors of Medicine be the only persons allowed to become coroners in the various counties. This was referred to the Reference Committee on Special Committees and Miscellaneous Business as was a second suggestion that a mental hospital for senile and alcoholics be created. Dr. Pfister introduced a resolution asking that legislation be introduced to allow the issuance of temporary licenses to practice medicine in South Dakota. This was referred to the Reference Committee on Special Committees and Miscellaneous Business.

Dr. Sherwood suggested that the Association recommend to the State Legislature that an annual registration fee be instituted, the proceeds to be used in the maintenance of the operation of the Board of Medical and Osteopathic Examiners. This, also, was referred to the Reference Committee on Special Committees and Miscellaneous Business.

Mr. Foster made several announcements. On motion, the meeting was adjourned at 3:50 p. m.

R. G. Mayer, M. D.

Secretary-Treasurer

S. D. State Medical Assn.

HOUSE OF DELEGATES

Second Session

The second meeting of the House of Delegates was called to order by Speaker H. Russell Brown at 5:15 p. m., Monday, May 22nd.

Dr. R. G. Mayer called the roll with the following officers present: W. H. Saxton, President; L. J. Pankow, Vice-President; R. G. Mayer, Secretary-Treasurer; John C. Foster, Executive Secretary. Councilors present were: J. D. Alway, Aberdeen; G. E. Whitson, Madison; M. M. Morrissey, Pierre; B. T. Lenz, Huron; F. D. Gillis, Mitchell; R. E. Van Demark, Sioux Falls; E. M. Stansbury, Vermillion; R. E. Jernstrom, Rapid City; A. W. Spiry, Mobridge; D. A. Gregory, Milbank; Delegates present were: J. C. Rodine and P. R. Scallin, Aberdeen District; T. W. Reul, Watertown District; C. E. Sherwood, Madison-Brookings District; L. C. Askwig, Pierre District; F. D. Leigh, Huron District; G. A. Stevens, D. H. Manning, C. J. McDonald and J. A. Kittelson, Sioux Falls District; M. A. Auld, A. P. Reding, Yankton District; W. A. Geib, A. A. Lampert and Lyle Hare, Black Hills District; Faris Pfister, Whetstone Valley District.

Dr. Stanbury moved that the reading of the minutes of the previous meeting be dispensed with. The motion was seconded by Askwig and carried.

Dr. Hare read the report of the Committee on Nominations which was as follows: President-Elect L. J. Pankow, Sioux Falls; Vice-President, D. A.

Gregory, Milbank: Speaker of the House, H. Russell Brown, Watertown; Councilors: J. D. Alway, Aberdeen; C. R. Stoltz, Watertown; M. M. Morrissey, Pierre; A. P. Reding, Yankton; Delegate to the AMA, H. Russell Brown, Watertown; Alternate Delegate, Wm. Duncan, Webster. Place of the 1951 Annual Meeting, Aberdeen, South Dakota.

The Committee recommended that the Executive Committee decide whether or not to plan a joint meeting with the North Dakota Medical Association. Dr. Hare moved the adoption of the report, seconded by Dr. Askwig and carried.

Dr. Stansbury read the report of the Committee on Credentials and moved its adoption, seconded by Dr. Kittelson and carried. Dr. Gillis read the report of the Committee on Resolutions and Memorials and moved its adoption, seconded by Dr. Lenz and carried. Dr. Stevens read the report of the Reference Committee on Reports of Officers and moved its adoption, seconded by Dr. Gillis and carried. Dr. Pfister read the first portion of the report of the Committee on Constitution and By-Laws concerning the Executive Committee and moved its adoption, seconded by Dr. Gillis and carried. Dr. Van Demark read the portion of the report of Committee on Special Committees and Miscellaneous Business concerning the establishment of a Grievance Committee, he moved its adoption which was seconded by Dr. Whitson. Discussion followed and the motion carried. Dr. Pfister then read the second portion of the report of the Committee on Constitution and By-Laws concerning a Grievance Committee and moved its adoption. Dr. Van Demark seconded. Dr. Whitson moved that the wording of the amendment to the By-Laws be changed from "members of the South Dakota State Medical Association" to "Doctors of Medicine," seconded by Dr. Jernstrom and carried. The amended motion made by Dr. Pfister was then carried. Dr. Pfister then moved the adoption of the entire report as amended, seconded by Dr. Morrissey and carried.

Dr. Askwig read the report of the Reference Committee on Standing Committees. The Committee recommended the acceptance of all the reports, seconded by Dr. Whitson and carried. The Committee then introduced a resolution as follows:

WHEREAS: the title of the new license certificate included in bold lettering the words, "State Board of Medical and Osteopathic Examiners," which is highly objectionable to new licenses in medicine,

BE IT RESOLVED: that said Board be requested to change the title of the certificate to read, "State Board of Examiners," and that these licenses be re-called and new certificates issued, corresponding to this resolution.

Dr. Askwig moved its adoption, seconded by Dr. Alway and, on a voice vote, the Speaker declared the motion lost. Dr. Pankow asked for a standing vote which verified the previous vote. The Committee then introduced a resolution requested by

the South Dakota Radiological Society, as follows:

WHEREAS: many of the insurance plans provide for payment of radiological and pathological services only when done in a hospital. This practice has two evils, in that it is gradually destroying the private practice of radiology and the other is that these services are being regarded as hospital rather than professional services, and

WHEREAS: a definite trend is developing in which the hospitals are gradually taking over the practice of medicine, and it can well lead eventually to hospitals taking over other services, such as obstetrics, gynecology, surgery and medicine, and

WHEREAS: insurance costs are actually increased for hospitalization by inclusion of X-ray services. Patients frequently enter the hospital for one or more days for X-ray and laboratory examinations, only. Unnecessary hospital costs are therefore added to the professional service charges which necessitates higher insurance premiums.

THEREFORE BE IT RESOLVED: to include radiological and pathological services in medical or surgical care plans as well as hospital plans.

Dr. Askwig moved its approval, seconded by Dr. Van Demark and carried. Dr. Askwig moved the adoption of the complete report with the exception of the resolution receiving an adverse vote, seconded by Dr. Alway and carried.

Dr. Van Demark read the report of the Reference Committee on Special Committees and Miscellaneous Business: The report of the Committee on Workman's Compensation recommends an increase in the present fee limit to physicians which is \$200.00 at present. The Committee approves in principle and recommends it be turned over with the approval of the House of Delegates to the Committee on Public Policy and Legislation for further action. Dr. Van Demark moved the adoption of the report, seconded by Dr. Jernstrom and carried. The report of the Spafford Memorial Prize Committee announces the annual award of the Spafford Memorial Prize to Warren Dirks, Harrisburg, South Dakota. Dr. Van Demark moved the adoption of the report, seconded by Dr. Manning and carried.

The report of the Committee on Nursing Training discusses the methods of recruitment and the present patterns of nursing education. Practical nurses are now being trained in the State and sixty-nine were licensed at the last meeting of the Examining Board. Dr. Van Demark moved the adoption of the report, seconded by Dr. Whitson and carried.

Report of the Auditing and Appropriations Committee: The Auditing and Appropriations Committee recommended a budget which is not

markedly changed from last year except for the recommendation of an increase of \$800.00 in the salary of the Executive Secretary. The report is clear in all details except for the word "this" in the last paragraph which might be interpreted to refer to the word salary, of 1/3 of the net profit on operation of the Journal, or both. The Committee recommends the acceptance of the report with the insertion of the word "salary" inserted in the report as marked on the report.

Dr. Van Demark moved the adoption of the report, seconded by Dr. Gillis and carried.

The report on the resolution concerning Temporary Licensure recommends the authorization of temporary licenses to practice in the State of South Dakota. It was recommended in an honest effort to conform to a recent ruling of the Attorney General. While the Committee appreciated the sincerity of purpose of the resolution, it feels there are many inherent dangers in a temporary license. Once a doctor is licensed in any way, it will be difficult to remove him from practice, particularly in areas where no other medical service is available. Severe political pressure will be brought on the State Examining Board, and newspaper publicity of any unfavorable nature will result if every temporary license is not made permanent. The Committee feels that licenses should be based on the permanent qualifications of the doctor, rather than political pressure and newspaper publicity, detrimental to the Medical Board and Societies. The Committee, accordingly, cannot recommend the passage of this resolution. No compromise measures seem warranted. Dr. Van Demark moved the adoption of the report, seconded by Dr. Hare and carried.

The report of the Committee on Prepayment and Insurance Plans outlined the growth of the South Dakota Injury-Illness Expense Plan. Five recommendations were made — (1) increase the amount of daily room allowance to more than \$5.00 a day. (2) increase the amount for other services and supplies to more than \$50.00. The passage of these two recommendations will increase the cost of insurance and will not tend to hold down the spiraling charges made by the hospital. Our Committee makes no recommendation on points 1 or 2 and requests a popular vote of the delegates. Dr. Van Demark moved the adoption of this portion of the report, seconded by Dr. Gregory and carried. Dr. Sherwood then made a motion that the permission asked by the Prepayment Insurance Committee be granted. Seconded by Dr. Stansbury and carried.

Recommendation 3 recommends the endorsement of similar policies to that of the St. Paul Mercury & Indemnity Co. The Committee recommends the passage of this recommendation with the addition that, "final action for such endorsement must be made by the Council." Dr. Van Demark moved the adoption of this portion, seconded by Dr. Stansbury and carried. Recommendation 4 empowers the Committee to modify the original agreement and recommendation. Recommendation 5 recommends a study to determine the actual number of people

covered by insurance. Your Committee recommends passage of the Recommendations 4 and 5. Dr. Van Demark moved the adoption of this portion, seconded by Dr. Morrissey and carried.

The report on the resolution concerning establishment of Doctors of Medicine as coroners: it is the opinion of the Committee that the function of coroners would best be carried out by a Doctor of Medicine. In certain localities physicians are not available; proposed legislation, accordingly, could not be too inclusive. The Committee recommends the resolution be referred to the Committee on Public Policy and Legislation for further investigation of the present system and appropriate recommendations, Seconded by Dr. Morrissey and carried.

Report of the Committee on Veteran's Administration and Military Affairs: the Committee recommends that non-service connected disabilities be cared for by civilian facilities with free choice of physician. The Committee recommends a program of adequate preparedness in case of atom bomb attacks. This State will be infiltrated with refugees from more densely populated areas and our problem will be most acute, since many of the refugees will carry radioactive contamination and injuries. Dr. James Sargent, who is with us today, has the following recommendations:

1. Appropriate legislation, including financial plans, be passed to cope with a disaster of severe magnitude.
2. The Governor of this State appoint a civilian defense director and advisory board to include several doctors of medicine.

The Committee recommends that these measures be undertaken at the earliest opportunity by the Committee on Public Policy and Legislation. Dr. Van Demark moved that the report be approved, seconded by Dr. Jernstrom and carried.

The resolution for an annual registration fee proposes an annual registration fee for physicians, to increase the funds available for the Board of Examiners. The Committee feels that if the purpose of the registration is to obtain funds, all branches of the healing arts should be required to register. This would increase the funds to a worthwhile sum — probably adequate for the Board. Liason with the other groups in the program would be necessary. The Committee does not recommend the passage of this resolution until such liason has been established and a mutual arrangement worked out. Dr. Van Demark moved that the report be not accepted and that it be left open for further study. Seconded by Dr. Alway and carried. Dr. Sherwood moved that we back the proposition of annual registration fees providing the Osteopaths will also go along. Seconded by Dr. Whitson, not carried.

Dr. Van Demark moved the adoption of the report of the Reference Committee on Special Committees and Miscellaneous Business as a whole, with the amendments. Seconded by Dr. Whitson and carried.

NEW BUSINESS:

Dr. Gregory introduced a resolution concerning a special liason committee from the members of

the SDSMA to serve and consult with the Division of Laboratories — State Department of Health. Dr. Gregory moved that the resolution be referred to the Council for action at their meeting Monday night, May 22nd. Seconded by Dr. Pankow and carried.

Speaker, Dr. Brown, expressed his thanks for the cooperation of the delegates.

Dr. Pankow moved the meeting adjourn, seconded by Dr. Whitson and carried. On motion the meeting was adjourned at 7:00 p. m.

R. G. Mayer, M.D., Secretary

REPORT OF THE PRESIDENT, 1949-1950

Due to circumstances over which I had no control, there was some delay in getting the year's work started. However, thanks to the able assistance of all officers — and now I wish to thank them publicly — I feel that a very satisfactory year resulted, and that definite progress was made.

In my opinion, other than the employment of a full time secretary some four years ago, the putting into action of the new constitution and by-laws was one of the most important things accomplished in the history of the society. It not only streamlined and made the society more workable, but provided for some new committees that have done outstanding work, not only for the good of the society, but for the people of South Dakota. To single out any would be injustice to the remainder, and no one needs to be told when he knows he has done a good job. Due to reasons stated earlier, I was unable to attend the conference of state-presidents — this I regret very much. However, I was able to attend, along with a strong committee, the North Central Conference in St. Paul. All council meetings were attended, and several meetings of special committees of which I was a member. Of these, the medical school committee was the most interesting. The school is fully approved; a new building in the not too distant future, and an endorsement program has been set up.

The special session of the legislature was attended, and satisfaction secured. Consultation and advice was given the secretary of the Greater South Dakota Society in preparing its brochure on socialized medicine.

Letters and telegrams were sent to our legislators on vital matters throughout the year, and I wish to state here that we have 100 per cent support in Washington.

Most district meetings were attended, and all had been very likely, active, instructive meetings. There were one or two conflicts that prevented me from attending others, for which I am sorry; and the remainder I was unable to find their meeting night, as no notices were sent.

To those officers and committee members who have given of their time so unselfishly, let me say Thank you — for that is the only way the success of the past year has been made possible.

There are several observations I would like to present for the consideration of those who follow:

1. All committees should be selected by the executive committee — in this way the vice-

president and president-elect have a voice in who may be included during their term of office.

2. Possible reorganization of districts to strengthen some of the more sparsely settled areas, making stronger groups.
3. The president should be put on the mailing list of all district secretaries — this would expedite visitations.

Again, thank you for the honor of serving you, and I am sure with this same support your future officers' success is assured.

I trust that even though I now pass into the ranks of the ex-presidents, I still may be able to serve the society in some minor capacity.

W. H. Saxton, M.D.

REPORT OF THE VICE-PRESIDENT

The Vice-president has fulfilled dutifully the position of the Vice-presidency. I have attended all meetings necessary to attend with the exception of one council meeting. I also attended the North Central Conference in St. Paul.

L. J. Pankow
Vice-president

SECRETARY'S REPORT — 1949-50

On June 21st your Secretary attended the 1949 Convention of the South Dakota Pharmaceutical Association in Aberdeen and talked to the pharmacists regarding the proposed raise in the subscription price of the South Dakota Journal of Medicine and Pharmacy from \$1.50 to \$2.00 per year. The proposition was favorably received with final action left to their executive committee.

On November 3rd and 4th I attended the Annual Conference of State Medical Association Secretaries and Editors at Chicago. Various subjects were discussed, such as Speakers' Bureaus, Co-ordination of National Meetings (Conference of Presidents, Medical Society Executives, County Medical Society Officers, Association Secretaries and Editors), Colorado's "Medical Grand Jury" Plan, Grievance Committees, Health Councils, Radio Programs, Legislative Campaigns, British National Health Service, etc.

The following two days I attended the Second Annual A. M. A. Public Relations Conference at Chicago. Numerous topics regarding public relations of the medical profession were discussed. Our Executive Secretary, John C. Foster, also attended these two Conferences and so we had opportunities to discuss matters pertaining to our own State Medical Association and the Journal.

On November 19th and 20th I attended the Annual North Central Medical Conference at St. Paul. Some of the subjects discussed were Consumer-Sponsored Medical Care Plans, Medicine Behind the Iron Curtain in Poland, and a panel discussion on Public Relations Program and its Evaluation was presented. Others representing South Dakota at this Conference were Doctors Saxton, Pankow, Brown, Calene, Totten and Executive Secretary Foster.

On Sunday February 12th I attended the Second

Annual Conference of the National Education Campaign at the Drake Hotel in Chicago. Various speakers discussed the program carried out the past year and outlined plans for 1950. Dr. G. E. Whitson, the South Dakota Chairman of the National Education Campaign Committee, and our Executive Secretary also attended this Conference. My attendance at all the above-mentioned Conferences was made without any expense to our State Medical Association, since whatever expense not paid by the A. M. A. was borne by me personally.

Two meetings of the Officers and Council were held during the past year. I attended the meeting in September but missed the January session because of weather conditions. This was the first Council Meeting that I failed to attend in the seven years that I have been Secretary.

I would like to propose that the Council obtain copies of Constitutions and By-Laws for component District Medical Societies from the A. M. A. and any available in the state, and a model copy for our District Societies be drawn up. Then each Councilor could present it to his Society for such action as they desire to take. I am under the impression that none of our component societies are working under a modern, up-to-date Constitution and By-Laws, most of them following tradition or going along haphazardly. As the younger men assume office in our District Societies they are handicapped by lack of knowledge of proper procedures to follow. I am sure that every District Medical Society would function more efficiently if it would adopt a modern Constitution and By-Laws and then follow its provisions.

Next year, 1951, is the 70th Anniversary of Organized Medicine in the Dakotas. I would like to have this Association invite the North Dakota State Medical Association to meet with us in Aberdeen to celebrate this event. The North Dakota Association will meet at Grand Forks May 27th-30th this year. Our invitation should be extended to them at that meeting.

In 1931 the two organizations celebrated the Fiftieth Annual Meeting of Organized Medicine in the Territory of Dakota by meeting in joint session at Aberdeen on June 1st-4th. Since I had the good fortune to be president of the host component society, the Aberdeen District Medical Society, that year, I remember well the successful meeting that was held at that time, the splendid three-day program of dry clinics and scientific papers, the stag party, the banquet and dance, the golf tournament, — the teas, musicales, theatre parties for the ladies.

The first day was taken over by the business sessions of the Council and House of Delegates of each Association meeting separately. Dr. P. D. Peabody, President of the South Dakota State Medical Association, and Dr. Andrew Carr, Sr., President of the North Dakota State Medical Association, alternately presided at the three days of scientific sessions. Now that facilities such as the Arena and Civic Theatre are available in Aberdeen, an even more successful affair could be staged. Five hundred guests attended at that time

and with good promotion even more should attend in 1951. With cooperation of program committees from the two states a fine scientific program would be assured. The medical and economic problems of North and South Dakota are very similar, our cities and rural communities are comparable in size, population, and so on. The physicians of the two states should have more opportunities to meet together and become better acquainted with each other. This 1951 meeting should be a prelude to an even greater event five years hence, when we celebrate the Seventy-Fifth or Diamond Anniversary of Organized Medicine in the Dakotas.

R. G. Mayer, M.D., Secretary

TREASURER'S REPORT—1949-50

Secretary-Treasurer's Account

INCOME

Balance on hand May 1, 1949	\$	70.37	
Received from Executive			
Secretary Foster		1,200.00	
Interest—U. S. Bond		25.00	
Total	\$	1,295.37	\$1,295.37

DISBURSEMENTS

Secretary's Salary		600.00	
Stenographer	\$	120.00	
Meetings—Officers			
& Council		25.50	
Bond -- Secretary-			
Treasurer		10.00	
Telephone &			
Telegrams		21.78	
Social Security Tax		8.25	
Postage, Bank, etc.		3.03	
Total	\$	188.56	188.56

Total		788.56	
Balance on hand May 1, 1950		506.81	
Total	\$	1,295.37	\$1,295.37

R. G. Mayer, M.D.
Secretary-Treasurer

REPORT OF THE EXECUTIVE-SECRETARY 1949-50

During the fiscal year 1949-50, the executive office has participated in more activities than any preceding year. More has been accomplished particularly in the field of public relations than in any previous year. A breakdown of the activities of the Executive-Secretary and the executive office follows:

PLACEMENT SERVICE

In order to better serve the communities in South Dakota desiring physicians and physicians desiring locations, the executive office handled requests from thirty-one communities and carried on correspondence with twenty-seven physicians. Five of the thirty-one vacancies have been filled.

PUBLIC RELATIONS

The Executive-Secretary spoke before forty-three luncheon groups and other organizations, appearing before a total of 2,230 people plus radio audiences on four other occasions.

Newspaper stories on these appearances and other activities of the Association have appeared periodically throughout the year. Biggest news story was the selection of Doctor Lyle Hare, Spearfish, as general practitioner of the year and his subsequent selection as Number 3, nationally. All daily papers in the state have been cooperative with those in Mitchell, Sioux Falls, and Rapid City leading the way.

Radio stations KELO and KSOO in Sioux Falls, WNAX in Yankton, KOTA in Rapid City, and KUSD in Vermillion have been leaders in co-operating with the executive office.

LIASON WITH OTHER GROUPS

The Executive-Secretary during the year attended forty meetings of the Association and allied groups, including the A. M. A. session in Atlantic City, the Interim Session in Washington, D. C., the Secretary-Editors meeting in Chicago, the Rural Health Conference in Kansas City, and others. He has also been a member of a special committee on medical defense against atomic attack, a director of the nurse survey, a director of the S. D. Mental Health Association, a director of the S. D. Hospital and Home Association. He has taken active part in the Whitaker and Baxter campaign in the State of South Dakota, visiting the leaders of ten of the most important organizations to secure resolutions against compulsory health insurance.

PUBLICATION

The Executive-Secretary, as Business Manager supervises the operation of the South Dakota Journal of Medicine and Pharmacy. In November Miss Dorothy Anderson succeeded Dale Whitcomb as Assistant Editor in charge of make-up and distribution. The operation of the Journal on a scientific basis is reported elsewhere.

Financially there was an income of \$12,585.01 and expenditures of \$12,560.94. Because of the change in our annual meeting plans the Journal suffered a loss which increased our deficit from \$700.00 to approximately \$1,000.00 which is still \$1,100.00 better than operations for the previous year.

HOME TOWN MEDICAL CARE PLAN

During the fiscal year we handled veterans care amounting to \$42,026.46. This program has decreased rapidly in scope until it represents a minor portion of the Associations activities but it remains important to the veteran who benefits from home town medical care.

A statement of operation follows:

Income	
Balance on hand, May 1, 1949 \$	1,295.00
Income from V.A.	42,026.46
Total	\$43,321.46
Disbursements	
Paid to members	\$39,148.55
Office expense and salaries	5,302.89
Balance on hand	\$ 1,972.30
Total	\$45,423.74
Net Loss	\$ 2,102.28

This loss has been billed to the Veterans Administration but at the time of the report remains as an account receivable.

LEGISLATIVE

Not being a legislative year in South Dakota there was little to be done on a local basis. The Executive-Secretary appeared before a Joint Senate-House Committee during the special session to help defeat a bill which, under the pretense of liberalizing the Basic Science Law, would have taken the teeth out of the law.

On the national scene, close contact has been maintained between the Executive-Secretary and the members of South Dakota's delegation in Washington with an excellent relationship resulting.

ANNUAL MEETING

The Executive-Secretary handled the details of the Annual Meeting in Yankton and the planning for the current meeting.

STATEMENT OF OPERATIONS

May 1, 1949 to April 30, 1950

Receipts	
Dues	\$20,402.00
Annual meeting	771.97
Annual meeting exhibits	1,575.00
Miscellaneous	680.50
Total receipts	\$23,429.47
Expenses	
Salary — Executive	
Secretary	\$7,200.00
Salaries — other	2,120.00
Telephone & Telegraph	472.53
Operating supplies	3,272.65
Rent	325.00
Taxes	110.04
Advertising	78.53
Benevolent fund	300.00
Annual Meeting	1,728.28
Dues and subscriptions	674.80
Miscellaneous	405.88
Travel — Executive-	
Secretary	2,451.62
Travel — other	1,063.73
Depreciation expense	192.48
Total expense	\$20,471.94
Net gain	2,957.53

RECOMMENDATION

It is the opinion of the executive secretary after managing four conventions for the Association that there are very few cities in the state that can comfortably accomodate the Annual Meeting. Therefore, it is suggested that the Council and the House of Delegates adopt a resolution to hold the Annual Meeting of the South Dakota State Medical Association rotating through the cities of Aberdeen, Huron, Sioux Falls twice and every 7th year hold the meeting in Rapid City.

John C. Foster
Executive Secretary

REPORT OF DELEGATE TO THE 98th ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION

The annual session of the American Medical Association was held in Atlantic City on June 6th to 10th, 1949. This meeting drew the second largest attendance in the history of the AMA. More than thirteen thousand physicians were registered and the total attendance was in excess of thirty one thousand. The House of Delegates had its usual nearly 100 attendance at all sessions.

Dr. Seale Harris was selected by the Association to receive 1949 distinguished Service Medal. Dr. Harris resides at Birmingham, Alabama and is Professor Emeritus of Medicine in the University of Alabama. Other nominees were: Dr. Alfred Blalock, of Baltimore and Dr. Shields Warren, of Boston. This award is presented annually "on the basis of meritorious services in the science and art of medicine."

Dr. Ernest E. Irons of Chicago assumed the presidency of the Association at this meeting. Annual elections were held and Dr. Elmer L. Henderson was made President-elect by unanimous vote. Dr. Henderson has just served two terms on the Board of Trustees and has been its chairman during the past year. Dr. F. F. Borzell and James P. Ruling were re-elected speaker and vice-speaker of the House of Delegates. Two vacancies existed in the Board of Trustees. Dr. Louis H. Bauer was re-elected to succeed himself and became new Chairman of the Board. Dr. F. J. L. Blasingame of Wharton, Texas was elected Trustee to fill the position vacated by Dr. Henderson. Dr. George F. Lull and Dr. J. J. Moore were re-elected secretary and treasurer respectively.

As the press widely announced through out the country, Dr. Morris Fishbein's activities in the American Medical Association have been changed upon recommendation of the Board of Trustees. Henceforth, Dr. Fishbein will confine his activities to Editorship of the Journal. It was stipulated that he completely eliminate writing and speaking on all controversial issues, excepting scientific subjects. The Diary in "Tonic and Sedatives" in the AMA Journal will be discontinued. In preparation for the time when Dr. Fishbein will retire, Dr. Austin Smith has been appointed Associate editor of the Journal and, for several months past, has been in training as assistant editor.

The Board of Trustees felt that this action was necessary because the editor had come to be looked upon by the public as official spokesman for the Association. The Board called attention to the thirty-seven years of faithful service of Dr. Fishbein to the AMA and paid tribute to his many outstanding accomplishments.

During the current year a national meeting of all interested groups will be called to consider and elaborate on the AMA 12 point program for the advancement of medicine and public health in the United States. Labor, Agriculture, and business representation, and all other interested groups will be invited to this conference.

In the field of medical service, action was taken

to encourage further the development of, and enrollment in, the many voluntary prepayment plans.

Consumer-controlled health plans, such as the cooperatives, were given much consideration by the House of Delegates. A set of twenty basic principles was adopted by the House to be used as a guide by state or county medical societies in giving approval to individual plans within their jurisdiction.

Extensive reports were made on the present status of the National Educational Campaign of the AMA. Clem Whitaker and Leone Baxter, directors of the campaign, spoke at great length on the subject and other reports were received. Information presented indicated definite progress in being made and results are forthcoming. In this grass-roots campaign to educate all people regarding the dangers of compulsory political health insurance, success will be achieved only through the wholehearted participation of each local and state medical association and each individual member.

Of necessity this report will not include a host of other matters which were deliberated and acted upon. The Journal of the AMA reports these in detail in the proceedings and there they are available to all.

Our delegate attended the Conference of Presidents and other state Medical Association Officers as well as a portion of the Grass Roots Conference of County Medical Society officers. Both of these meetings were interesting, instructive, and well attended.

In concluding, I desire to thank you again for your confidence in permitting me to represent the Association as your delegate.

Respectfully submitted,
H. Russell Brown, M.D.
Delegate to AMA

REPORT OF DELEGATE TO A. M. A. INTERIM SESSION—WASHINGTON, D. C. DEC. 6-9, 1949

The Washington, D. C. clinical session of the A. M. A. was attended by more doctors and visitors than any previous interim meeting. Approximately 5,000 doctors were registered and, of these, more than 3,000 were fellows of the association. The total attendance was in excess of 8,000.

The clinical sessions and scientific exhibits covered the field of medicine very broadly from the general practitioner's view point and were well attended. Motion pictures, black and white television, and particularly color television also evoked much interest from those in attendance.

At the opening session of the House of Delegates, 187 of its full complement of 192 were seated. The first item of business was the selection of the "General Practitioner of the Year." Nominees submitted by the Board of Trustees included Dr. Andy Hall of Illinois, our own Dr. Lyle Hare, and Dr. Thomas Rhine of Arkansas. Dr. Andy Hall was awarded the 1949 gold medal for "exceptional service by a general practitioner."

The House of Delegates amended the By-Laws to provide for the levying of annual dues on active

members of the A. M. A. Your delegate was one of the five members of the Reference Committee considering this subject, and can state that the hearings were characterized by large attendance and intense interest. Practically no opposition was expressed to levying dues, but much discussion centered around the mechanism for accomplishing the task. Following enactment of the provision for annual dues, the Board of Trustees recommended to the House that the 1950 dues be set at \$25.00. This action was then voted by the House without dissent.

The new regulation will require each member to pay his \$25.00 A. M. A. dues for 1950 through his State Association to the A. M. A. Provision will be made to exempt retired and disabled physicians and those to whom such payment would be a financial hardship, such as internes, residents, etc. Failure to pay the dues within 30 days after notice of delinquency will forfeit membership in the Association. Membership will now entitle a member to attend the scientific sessions which previously had been limited to fellows.

Fellowship status in the A. M. A. is unchanged. Dues for fellowship remain at \$12.00 per year and entitle the individual to subscription to the Journal or other of the A. M. A. scientific publications.

In describing the need for annual dues, I can best quote from the report of the reference committee in recommending this action. Briefly and clearly, this report states: "The responsibilities of the American Medical Association are increasing constantly and the revenues of its publications can no longer meet the costs of its broadening program. The American Medical Association recognizes the greatly augmented activities of the constituent associations and of the component medical societies. However, it is aware of its own responsibility in providing aggressive, effective leadership for the medical profession on a national level. This leadership includes constructive assistance in building and improving the many splendid voluntary health insurance systems so that all who desire or need prepaid medical care may be provided with it without political controls or compulsion.

The American Medical Association, like other great national organizations, must depend on dues from its membership to support its growing program of service, both to the profession and to the public."

Many other matters were considered and acted upon by the House of Delegates. Each member is urged to read the proceedings and other reports in the Journal to familiarize himself with these. The need for brevity precludes their discussion in this report.

Of paramount interest were reports dealing with the Educational Campaign. In the first 11 months of 1949, \$2,250,000 were collected by voluntary assessment. The assessments were collected from about 80% of the physicians who could be expected to contribute. A. M. A. membership includes a great many retired physicians, internes, residents, and others who could not be expected to participate. The percentage and the total collected

constitutes an excellent record of physician support in this volunteer effort.

Of the \$2,050,000 already budgeted, 75% has been expanded for literature and campaign material, 10% for organizational work, and 15% for operational expense. More than 55,000,000 pieces of literature have been distributed.

A feeling of satisfaction prevailed with regard to the progress, present status, and results of the National Education Campaign to date. Likewise a strong fighting feeling was evident, best characterized by the desire and intention to intensify our efforts in the coming year, to the end that political domination of the profession and socialistic regimentation of American life will be provided.

Respectfully submitted,
H. Russell Brown, (M.D.)
Delegate to A. M. A.

December 24, 1949

COUNCILOR AT LARGE

Councilor at Large addressed the South Dakota State Pharmaceutical Association meeting June 1949, as representative of the State Medical Association.

Attended North Central Conference in St. Paul November 1949. Failed to arrive at Council Meeting September 1949 (because of blow-out tire).

January Council Meeting missed because date of meeting postponed.

John L. Calene
Councilor at Large

REPORT OF THE COUNCIL

Two meetings of the Council have been held since the Annual Convention at Yankton last May. The first meeting was held at Huron on Sunday, September 18th. Six officers and ten Councilors were present. Numerous subjects connected with business of the Association were brought up and discussed. The minutes of the meeting were published in the October issue of the South Dakota Journal of Medicine and Pharmacy.

One of the important actions taken was the increase of the subscription price of the Journal from \$1.50 to \$2.00 annually, and another was the naming of Dr. Lyle Hare of Spearfish as General Practitioner of the year for South Dakota. Subsequently Dr. Hare achieved third place at the Interim Session of the A. M. A.

The January Council Meeting was postponed to the 29th because of inclement weather and was also held in Huron. Four officers and eight Councilors were present. A meeting of officers of District Medical Societies was held the same day, preceding the session of the Council. Minutes of the Council meeting were published in the March issue of the Journal.

D. A. Gregory, M.D.,
Chairman of the Council
R. G. Mayer, M.D.,
Secretary of the Council

TO THE OFFICERS AND MEMBERS OF THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

Report of the Chairman of the Council

The Chairman of the Council attended all meetings of the Council except the meeting held at Yankton.

The proceedings of the Council have been published in the Journal and are in the report of the secretary.

I was unable to attend the North Central Conference much to my regret.

Sincerely,

D. A. Gregory, M.D.

Chairman of the Council

AUDITING AND APPROPRIATIONS COMMITTEE MEETING MAY 20, 1950

Chairman L. J. Pankow called the meeting to order at 5:30 p.m. Present were members Gillis, Pankow and Whitson. Officers attending were Drs. Saxton, Brown, Mayer, Van Demark, Jernstrom and Foster. Dr. Pankow called for an examination of the certified audit of the general funds as reported by John W. Sorenson, CPA. Dr. Gillis moved that the Audit be accepted, seconded by Dr. Whitson, carried. The committee then discussed the budget for the coming year and set up the following estimate:

Estimated Income	\$22,600.00
Dues	\$20,000.00
Annual Meeting, etc.	2,600.00
Estimated Disbursements	
Secretary's expense	1,200.00
Attorney & Audit	500.00
Dues & Subscriptions	700.00
Council & Officers expense	1,300.00
Benevolent Fund	200.00
Annual Meeting	2,500.00
Exec. Sec. travel expense ..	2,400.00
Office expense	5,000.00
Exec. Secretary's salary ...	8,000.00
Reserve Fund	452.00
	<hr/>
	\$22,252.00

Dr. Gillis moved that the budget be accepted, seconded by Dr. Whitson, carried.

Dr. Mayer's report was read and a motion was made to approve it by Dr. Whitson, seconded by Dr. Gillis and carried.

The committee recommended that the executive secretary accept the above recommended salary plus 1/3 of any net profit on the operation of the Journal provided he agree that he would not request an amount to exceed this salary for a period of three years. The executive secretary agreed to this arrangement.

Meeting adjourned at 6:45.

L. J. Pankow, M.D.

CREDENTIALS COMMITTEE

NUMBER OF OFFICERS	5
DELEGATE TO A. M. A.	1
COUNCILORS PRESENT	11

COUNCILOR AT LARGE	1
NUMBER OF DELEGATES PRESENT	15
TOTAL NUMBER OF MEMBERS	
REGISTERED	176
TOTAL GUESTS PRESENT	18
WOMEN'S AUXILIARY REGISTERED	59
E. M. Stansbury, M.D.	
Chairman	

REPORT OF COMMITTEE UPON REPORTS OF OFFICERS

Huron, South Dakota, May 22, 1950

1. The report of the President is accurate and in good form. The committee thanks him and moves the adoption of the report as read.
2. We commend the Vice-President for his usual devotion to duty, for his indefatigable efforts in behalf of the cause, but most particularly for the brevity of his report. The committee moves the adoption of the report as read.
3. The activities of the secretary were more than sufficient, were brief and understandingly reported. We heartily support him in his proposal to raise the subscription price of the South Dakota Journal of Medicine and Pharmacy, and in his plea for more support of the Journal by members of the Association, and we thank him for the contribution of his personal finances. We move the adoption of the report as read.
4. We move the adoption of the report of the Treasurer without further ado.
5. The report of the activities of the Council is well covered and well constructed. We move its adoption.
6. The Councillor at large reported his activities in 41 words. The committee thanks him and is happy that he suffered no personal injury on account of the "blow-out" of his front tire at 70 miles per-hour. We move the adoption of his report.
7. The reports of the delegate to the AMA are interesting and informative. The committee presents him its thanks and moves the adoption of his report.
8. The committee commends the committee on Public Policy and Legislation, and recommends that the committee appointed for 50-51 definitely oppose any attempt of the chiropractors to sabotage our Basic Science Law. This committee supports the formation of a "Grievance Committee." We move the adoption of this report.
9. The reports of the district councillors have been read and approved by this committee.
10. We again commend the executive secretary for his arduous labor in behalf of the Association and particularly for his handling of the reports. It certainly expedited affairs of the House and we suggest all reports be in the hands of the executive secretary two weeks prior to each meeting. We look with favor upon his recommendation relative to the meeting places of this

Association in the state. We move the adoption of his report.

G. A. STEVENS
 LYLE HARE
 M. M. MORRISSEY

REPORT OF COMMITTEE ON RESOLUTIONS AND MEMORIALS

WHEREAS, the recent serious fire in Mitchell destroyed about one-half of its available hotel facilities, thereby necessitating a change in the meeting place for our State Association at an extremely late date,

BE IT RESOLVED, that the South Dakota State Medical Assn. extend its thanks and appreciation to President Saxton, the loyal doctors in the Huron District, the local committees and the Ladies Auxiliary, who have so graciously and efficiently provided facilities and arrangements for the success of the 69th annual meeting of the South Dakota State Medical Association.

WHEREAS, The Management of the Marvin Hughitt and Tams Hotels in the city of Huron have been most cooperative in providing facilities and making arrangements for the success of the 69th Annual meeting of the South Dakota State Medical Assn.,

BE IT RESOLVED, that the said Medical Association extend its thanks and appreciation to the said Hotels and their managers, N. S. Jamieson of the Marvin Hughitt Hotel and Mrs. Barbara Tams of the Tams Hotel.

WHEREAS, The Elks Club of the City of Huron has been very generous in giving space for the Annual State Meeting of the South Dakota State Medical Association,

BE IT RESOLVED, that said Medical Association extend its thanks and appreciation to the Elks Club of Huron.

WHEREAS, The Daily Plainsman and Huronite has been most cooperative in presenting to the public news of the 69th annual meeting of the South Dakota State Medical Association,

BE IT RESOLVED, that the said Medical Association extend its sincere thanks to the Daily Plainsman and Huronite and its editor, Bob Lusk, and Staff.

WHEREAS, the efficient and cooperative staff of the Marvin Hughitt Hotel in arranging and serving the 69th annual banquet of our State Medical Association has certainly contributed to the success of our meeting,

BE IT RESOLVED, that the South Dakota State Medical Association extend its thanks and appreciation to the Marvin Hughitt Hotel Staff.

WHEREAS, Illness has prevented "Chick" Robbins, our President-Elect, from attending the 69th meeting of the South Dakota State Medical Association,

BE IT RESOLVED, that the said Association extend to him our sincerest and heartfelt thanks for all his wonderful work, both in the Council and Medical Association duties throughout his many years of service.

WHEREAS, the Chamber of Commerce of the

City of Huron has been most cooperative in providing facilities and making arrangements for the success of the 69th meeting of the South Dakota State Medical Association.

BE IT RESOLVED, that the said Medical Association extend its thanks to the Chamber of Commerce, its Executive Secretary, Mr. George Morrison, and to all others in assisting in the work of preparation for this meeting.

F. D. Gillis, M.D.
 Paul Scallin, M.D.
 Paul S. Tschetter, M.D.

REPORTS OF STANDING COMMITTEES Committee on Scientific Work

The scientific program on the 1950 Annual Session of the South Dakota State Medical Association represents the work of this committee. We hope you will enjoy it.

W. H. Saxton, M.D.
 C. E. Robbins, M.D.
 R. G. Mayer, M.D.

MONDAY MORNING—MAY 22

Presiding Officer—President W. H. Saxton, M.D.

8:45—9:15 A. M. Preview of the Exhibit.

9:15—10:00 A. M. "An improved Technic for the Operative Treatment of Common Anorectal Lesions." Film — Courtesy, Wm. S. Merrill Co.

10:00—10:45 A. M. "Severe Injuries About the Ankle Joint" — Raymond Householder, M.D., Assistant Chief Surgeon, the Milwaukee Road.

10:45—11:15 A. M. Recess to View Exhibits.

11:15—11:45 A. M. "Bladder Tumors" — James Sargent, M.D., Milwaukee, Professor of Urology, Marquette University.

12:15—1:30 P. M. Noon Luncheons.

MONDAY AFTERNOON—MAY 22

Presiding Officer—John C. Hagin, M.D.

1:30—2:00 P. M. "The Diagnostic Significance of Some Common Ocular Complaints" — P. J. Leinfelder, M.D., Professor of Ophthalmology, University of Iowa, Iowa City.

2:00—2:45 P. M. "Congenital Dislocation of the Hip in the Newborn and during Early Postnatal Life" — Vernon L. Hart, M.D., Minneapolis.

2:45—3:15 P. M. Recess to View Exhibits.

3:15—4:00 P. M. "Treatment of Convalescent Poliomyelitis" — Earl C. Elkins, M.D., Department of Physical Medicine Mayo Clinic (Courtesy National Foundation For Infantile Paralysis).

4:00—4:30 P. M. "What of Tomorrow?" — James Sargent, M.D., Milwaukee.

5:00—7:00 P. M. House of Delegates Meeting — Ladies Parlor, Elks Club, Marvin Hughitt Hotel.

7:00 P. M. Annual Banquet — W. H. Saxton, M.D., presiding and presenting Mr. Edward J. O'Connor, Insurance Economics Society of America, speaking on "The Farewell State." Welcome to Huron by John S. Tschetter, M.D., Mayor.

9:30 P. M. Council Meeting — Mezzanine, Marvin Hughitt Hotel.

TUESDAY MORNING—MAY 23

Presiding Officer—M. W. Pangburn, M.D.

9:00—9:30 A. M. "The Story of Wendy Hill." Film

— Courtesy S. D. State Medical Association Diabetes Committee and the State Department of Health.

9:30—10:00 A. M. "Female Pelvic Surgery—When Is It Necessary?" — E. Stewart Taylor, M.D., Denver, Professor of Obstetrics and Gynecology, University of Colorado.

10:00—10:30 A. M. Recess to View Exhibits.

10:30—11:15 A. M. "Common Forms of Neuritis and Therapy" — Louis J. Karnosh, M.D., Cleveland Clinic.

11:15—12:00 Noon "Recent Advances in Antibiotic Therapy" — Edwin J. Pulaski, M.D., Chief, Army Surgical Research Unit, Brooke General Hospital, Fort Sam Houston, Texas.

12:00—1:30 P. M. Noon Luncheons.

TUESDAY AFTERNOON—MAY 23

Presiding Officer—R. A. Buchanan, M.D.

1:30—2:15 P. M. "Treatment of Acute Allergy Met in General Practice" — W. F. Wittich, M.D., Minneapolis; Secretary, American College of Allergists.

2:15—2:45 P. M. "Differential Diagnosis of Malignancy in the Gastrointestinal Tract" — Galen M. Tice, M.D., University of Kansas Medical Center. (Courtesy South Dakota division, American Cancer Society.

2:45—3:15 P. M. Recess to View Exhibits.

3:15—3:45 P. M. "Use of Hormones in Obstetrical and Gynecological Practice" — E. Stewart Taylor, M.D., Professor of Obstetrics and Gynecology, University of Colorado.

THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

This being a non-legislative year, there was not a great deal of activity. However, an unexpected bill, attempting to change our basic science law was introduced by the chiropractors at the special session. This we were able to check, but it looks as though the matter will have to have some further consideration by our legislative committee this next year. This is brought about by a request from the State Board of Medical and Osteopathic Examiners, who feel that "there should be some way in which the basic science law could be modified to enable the Board to use discretion in the issuance of certificates to obviously well qualified older men who find difficulty in the basic sciences." We must be on guard and study carefully any ill advised amendments which might react unfavorably in our relation to other states and the public welfare.

As far as public policy is concerned, we are trying to follow the council of the American Medical Association, making our uniform with other states. We are investigating the formation of a grievance committee, which in all probability, will go into action within the next year. It will show our good faith in trying to crack down on those few, if any, in our state who might charge excessive fees, or have any other unethical practice that might enhance the idea of socialization of medicine. Another thing that hurts our public relations is the public complaint of inability to get a doctor. Some societies have set up a plan whereby the public

can get a doctor, even though their own may not be available. The executive secretary had a very full year of conferences and talks with various organizations, all in the fields of medicine in South Dakota. At the present time we are gaining ground very satisfactorily, but a strong committee is recommended for the ensuing year to carry on.

W. H. Saxton, M.D.

C. E. Robbins, M.D.

COMMITTEE ON PUBLICATIONS

The South Dakota Journal of Medicine and Pharmacy, during the past Medical Association fiscal year, has carried 442 pages of medical, pharmaceutical and editorial material. It has carried a total of 285 pages of advertising. This is an increase of 14 pages of advertising and a decrease of 23 pages of other material over the figures given at the last annual meeting.

The deficit, which was reported at \$2,100.00 but which was subsequently audited to show \$2,400.00 has been reduced to \$1,200.00. The reason for inaccuracies on these figures stem from the fact that the Journal operates on a calendar year.

The Publications Committee consists of the Chairman, Dr. R. G. Mayer, Aberdeen, who is also Editor of the Journal; Dr. D. H. Manning, Sioux Falls; Dr. Donald Slaughter, Vermillion, and the Executive Committee of the South Dakota Pharmaceutical Association. Mr. Whitcomb, who acted as Assistant Editor for the first two years, was relieved of his duties November 1, 1949. Miss Dorothy Anderson was employed on a part time basis to handle the mechanical details of setting up the publications, the remainder of her time is spent on the Veteran's Administration program.

Other members of the staff are D. L. Kegaries, M.D., Rapid City; J. A. Nelson, M.D., Sioux Falls and Bliss C. Wilson, Pierre, who has charge of the Pharmaceutical Division of the Journal. Our Executive Secretary, Mr. J. C. Foster, is the Business Manager of the Journal.

No other publications have been put out by the Association this year. The Rural Health Committee contemplates the publication of a Health Needs and Resources Survey in the near future.

There was a gross income, during the year, of \$12,935.83 as against \$10,593.23 the year before. This is an increase of about 20% in revenue.

R. G. Mayer, M.D.

D. H. Manning, M.D.

Donald Slaughter, M.D.

COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

Your Committee on Medical Schools and Hospitals begs to report.

First, on the statistics of our Medical School — in November, 1949, the Medical School was placed on the fully approved list by the joint action of the Council on Medical Education and Hospitals and the Association of American Medical Colleges. It has been a number of years since our school has been on the fully approved list. Graduates of our two year Medical School at the University are now

being admitted into the Junior year in accredited Medical Schools without any great difficulty. The staff of our Medical School has been increased.

Research is now being emphasized; the construction of the new medical building will be started in July of this year. The medical clerkship, which is now in its third year, is being well received by both physicians and students. We believe that for the present, every effort should be made to strengthen the two year school. The four year medical course should not be considered in the immediate future. Every effort must be made to secure sufficient appropriations to make the two year Medical School outstanding.

Our report on hospitals is as follows:

1. The present hospital situation shows considerable improvement. We have at many different points in the state a hospital building program, both for new hospitals and additions to our present hospitals. Your committee urges a conservative attitude in the building of new hospitals. It is essential that some responsible organization take over the new hospital after it is built.
2. Physicians must be available to staff the new hospitals. In communities where these conditions cannot be met, we doubt the advisability of building a hospital. In our opinion, it would be much better to consider establishment of health centers in such communities.
3. We have sent out questionnaires to some fourteen of the leading hospitals in the state covering X-ray and laboratory practices. Replies have been received from eleven hospitals. The method of paying fees to the radiologists and pathologists may be divided as follows: (1) straight salary (2) percentage of gross receipts and (3) percentage of net receipts.

Out of the eleven hospitals from which replies have been received only one has their pathologist and radiologist on a straight salary. This hospital is well satisfied with their arrangement.

Only one has their radiologist on a net fee schedule. The radiologist receives 40%.

Nine of the hospitals from which replies have been received pay their radiologist on a percentage of the gross fees. The gross fees paid by the hospitals vary from 25% to 35%. Three of the hospitals do not have a pathologist, but send all their specimens to the State Laboratory.

The replies received indicate considerable dissatisfaction with the gross percentage method of payment. The fees for laboratory and X-ray vary somewhat in the different hospitals throughout the state, but in a general way the fees are about in line, with very few exceptions.

The replies to the questionnaire indicate that a number of hospitals desire either a full time or a part time pathologist and radiologist; a considerable number are dissatisfied with their present X-ray laboratory set-up.

F. S. Howe, M.D.
W. H. Saxton, M.D.
R. A. Buchanan, M.D.

COMMITTEE ON PUBLIC HEALTH G. J. VAN HEUVELEN, M.D., GENERAL CHAIRMAN

SUBCOMMITTEE ON CANCER

The Subcommittee on Cancer of the South Dakota State Medical Association conducts a year around campaign, for its members automatically become members of the South Dakota Division of the American Cancer Society, an organization that has become very well established and active in our State in the past several years.

Among the accomplishments of this organization recently are the following:

1. The creation of a patient service program, furnishing biopsy service and Papanicolaou smear interpretation for the indigent.
2. The creation of a maintenance and transportation aid fund for the indigent.
3. The fostering of two cancer research programs at the State University Medical School.
4. The creation of a fellowship for nurses of the state in the care of the cancer patient at the New York Memorial Hospital. This fellowship has recently been held by Sister M. Virgil, OSB, of Yankton.
5. The creation of a loan service with funds for those cancer patients finding themselves in need of temporary financial aid.
6. A grant in money to assist in the formation of a tumor clinic at Yankton.

Doctor E. H. Brock of Rapid City attended the Annual Meeting of the American Cancer Society in New York, October 1949.

Doctor D. H. Breit of Sioux Falls is the president of the South Dakota Division of the American Cancer Society. Doctor Paul V. McCarthy of Aberdeen is the present executive director. Other Medical Society members are, Doctor Hans Jacoby of Huron and Doctor G. F. McIntosh of Eureka.

P. V. McCarthy, M.D.
D. H. Breit, M.D.
Hans Jacoby, M.D.

SUBCOMMITTEE ON TUBERCULOSIS

With a Legislative year approaching it is the opinion of the Committee that definite action should be taken at this time endorsing a more positive attitude toward isolation in cases of tuberculosis and a more forceful policy toward examination of suspected cases of tuberculosis. A copy of the Minnesota and Kansas regulations will be presented with this report. It is the feeling of this Committee that the House of Delegates of the South Dakota State Medical Association should recommend to the coming session of the State Legislature that new regulations along one of the suggested lines be approved. It is our understanding that the Indian Service and the Veterans Service will cooperate with existing health regulations if they are so constructed as to be workable. We feel that with the present situation more workable regulations should be drawn up.

It is hoped that with the next session of the Legislature sufficient funds will be appropriated

to start construction on the proposed fireproof building at the State Sanatorium.

We feel that the Mobile Unit is worthwhile and should be continued. We wish to compliment the State Department of Health on the work they have done. We feel that some regulation compelling examination of the suspected cases would make their program effective.

W. L. Meyer, M.D.

A. W. Spiry, M.D.

D. S. Baughman, M.D.

LAWS OF 1949
CHAPTER 471
(S. F. No. 14)

An Act To Provide For the Control of Tuberculosis: Amending Minnesota:

Statutes 1945. Sections 144.42, 144.43, 144.44, 144.45, 144.46, 144.47, 144.48, 144.49.

Be it enacted by the Legislature of the State of Minnesota:

SECTION 1. Minnesota Statutes 1945. Section 144.42, is amended to read:

144.42. Subdivision 1. When any physician has a person under his treatment for tuberculosis he shall report to the state board of health, on forms furnished by the board, full particulars as to such person, within seven days after the date on which the diagnosis is made.

Subd. 2. If any municipality requires that any physician therein report any person under his treatment for tuberculosis to the board of health of the municipality, the local board shall make a report to the state board of health, on forms furnished by the state board, not later than the fifth day of each month showing full particulars of such reports made during the preceding month.

Sec. 2. Minnesota Statutes 1945, Section 144.44, is amended to read:

144.423 Subdivision 1. Any member of the state board of health or its authorized agent or any member of a local board of health who has information that a person may be afflicted with tuberculosis in the infectious stage may make a report thereof to the county board of the county in which such person resides or is found.

Subd. 2. The county board by resolution may require any law enforcement officer to visit such person and persuade such person to go with such law enforcing officer to and enter as a patient in the public sanatorium or hospital named in the resolution.

SEC. 3. Subdivision 1. As used in this section, "examination" includes tests and procedures recommended by the state board of health.

Subd. 2. As used in sections 3, 4, and 5, "patient" means any person suspected of being afflicted with tuberculosis in the infectious stage.

Subd. 3. When complaint is made to a board of health that any person is afflicted with tuberculosis and so conducts himself and lives as to expose other persons with whom he associates to the danger of infection, the board forthwith shall investigate the circumstances alleged. If the board finds that there is reasonable grounds to suspect

that such person has tuberculosis in the infectious stage and does by his conduct and mode of living endanger the health and well-being of other persons, it shall file with the district court of the county of the patient's residence or present a petition for commitment to a sanatorium or hospital maintaining suitable quarters for the care of such patients, setting forth the name and address of the patient and the reasons for the application. If a judge after a hearing of such court determines it to be for the best interest of the patient, his family or of the public, such judge may direct the sheriff or any other person to apprehend the patient and take him to and confine him in a sanatorium or hospital for examination to determine whether or not he is afflicted with tuberculosis in the infectious stage.

Subd. 4. The person ordered by the court to make such apprehension, conveyance, and confinement may execute the order on any day and at any time thereof by using all necessary means, including the breaking open of any door, window, or other part of a building, vehicle, boat, or other place in which the patient is located, and the imposition of necessary restraint upon the person of such patient.

Subd. 5. In all such proceedings the county attorney shall appear and represent the petitioner, and such judge or court commissioner shall appoint counsel to represent the patient. This counsel shall receive compensation from the county in such amount as such judge or court commissioner may order if the patient is financially unable to provide his own counsel.

Subd. 6. The patient shall be examined at such time and place and upon notice to such persons, served in such manner, as such judge or court commissioner may direct. Three duly licensed doctors of medicine shall be appointed to assist in the examination. The patient shall be entitled to have his physician present at the time of the examination. The three doctors so appointed shall examine the patient and report their findings. If their findings are positive, a time and place shall be fixed for hearing on the petition for commitment. The patient shall be given at least 24 hours' notice of the time and place of such hearing unless he waives the same.

Subd. 7. At least one of the doctors shall appear at the time of the hearing and give testimony. If the patient is found to be afflicted with tuberculosis in an infectious stage and such judge shall find that such person does by his conduct or mode of living, endanger the health and well-being of other persons and finds and determines it to be for the best interests of the patient, his family or the public, such judge may issue to the sheriff or any other person, a warrant in duplicate, committing the patient to the custody of the superintendent of the sanatorium, where he shall remain until discharge therefrom by the superintendent of the said sanatorium when his discharge will not endanger the life or health of any other person, or by the court upon petition of said patient.

Subd. 8. Any person committed to a public

sanatorium or hospital under the provision of section 2 or 3 shall observe all regulations of the sanatorium or hospital. When any person so committed fails to obey these regulations, he may be placed apart from the other patients and restrained from leaving. When any such person willfully violates these regulations or repeatedly conducts himself in a disorderly manner, he may be taken before a court of competent jurisdiction by order of the superintendent of the sanatorium or the chief medical officer of the hospital, who may enter a complaint against such person for disorderly conduct. After a hearing and upon evidence of such disorderly conduct, the court may commit such patient to the state sanatorium or the state institution where disciplinary quarters are available.

SEC. 4. The directors of state agencies responsible for the supervision of the operation and maintenance of the state sanatorium and other state institutions are hereby authorized and directed to provide adequate facilities at the state sanatorium and one or more state institutions where proper care can be provided and where proper precautions can be taken to detain by reasonable force, if necessary, any patient committed to the state sanatorium or institution under the provisions of section 3.

SEC. 5. The expense of the proceedings to commit and the cost of the care and treatment furnished to the committed person is a charge against the county of his residence. If he did not reside in any county continuously for one year next preceding the institution of the proceedings for his commitment, the cost of the care and treatment shall be paid by the county of the presence of the patient when committed. Any question as to the county of residence of a committed person shall be determined in accord with the provisions of Section 376.18.

SEC. 6. Minnesota Statutes 1945, Section 144.48, is amended to read:

144.427. It is a nuisance for any person having tuberculosis to dispose of his sputum, saliva, or other secretion or excretion in a manner that the health or well-being of any other person is endangered. When complaint is made to the board of health of the municipality or the county board of the county in which such acts are committed, the board receiving such complaint shall investigate and, if the nuisance is such as to be dangerous, shall serve a notice upon the person so complained of requiring him to dispose of his sputum, saliva, or other bodily secretion or excretion in a manner as to remove all such danger.

SEC. 7. Any physician attending a person having tuberculosis shall give proper instructions to the patient and members of his household on methods and procedures to safeguard the health and well-being of the members of said household as recommended by the state board of health.

SEC. 8. The attending physician of any person having tuberculosis, when arrested condition is had, as defined by the state board of health, shall report that fact to the local board of health and the

board shall file such report in the records of its office.

SEC. 9. Minnesota Statutes 1945, Section 144.43, is amended to read:

144.43. It is unlawful for inmate known to be afflicted with tuberculosis in the infectious stage to be cared for in a penal or charitable institution in the same room or ward with other inmates not themselves afflicted with tuberculosis.

SEC. 10. Minnesota Statutes 1945, Section 144.45, is amended to read:

144.45. No teacher, pupil, or employee about a school building who is afflicted with tuberculosis shall remain in or about such building unless he has a certificate issued by the local board of health stating that he does not endanger the health of other persons by his presence in such building.

SEC. 11. Minnesota Statutes 1945, Section 144.46, is amended to read:

144.46. Subdivision 1. Within 24 hours after any apartment or premises are vacated by reason of the death, or the removal of a person having tuberculosis, person or physician in charge shall notify the local board of health and thereof. The apartment or premises shall .

Subd. 2. Upon receipt of such notice of vacation, the local board of health shall forthwith order the apartment or premises and all infected articles therein effectively renovated and disinfected as recommended by the state board of health. If the apartment or premises are not occupied after such death or removal, the local board of health shall serve written notice upon the owner, of such the apartment or premises or his agent requiring the apartment or premises to be renovated or disinfected in accordance with the regulations of the board.

SEC. 12. Minnesota Statutes 1945, Section 144.47, is amended to read:

144.47. If any apartment or premises so vacated are not effectively renovated and disinfected within 36 hours after the order or direction of the board of health is given to the owner or his agent the board shall place a placard, upon the door of the infected apartment or premises, which placard shall read:

"NOTICE"

"Tuberculosis is a communicable disease. These apartments have been occupied by a consumptive and may be infected. They must not be occupied until the order of the health officer directing their renovation and disinfection has been complied with. This notice must not be removed under a penalty of the law, except by the health office or an authorized officer."

SEC. 13. When any person having tuberculosis is not attended by any physician or when the physician attending any such person fails to perform any duty required of him by any provision of sections 144.42 to 144.48, the duties required to be so performed by any such physician shall be performed by the local board of health.

SEC. 14. Minnesota Statutes 1945, Section 144.49, is amended to read:

144.49. Subdivision 1. Any person violating any regulation of the board or any lawful direction of a board of health or a health officer is guilty of a misdemeanor.

(Suggestions by Dr. W. L. Meyer on Minnesota Laws)

SEC. 3. Subd. 6. Two duly licensed doctors of medicine shall be appointed to assist in the examination. One of these doctors to be a representative of the state board of health.

SEC. 5. The cost of the care and treatment furnished to the committed person is to be charged against the state.

It shall be the duty of the court to determine the state of residence of the patient.

Patients not residents of this state may be admitted to the state sanatorium upon posting of a bond equivalent to one year's treatment. Such bond or guarantee may be given by the state where the patient claims residence. This cost is to be determined by the average cost per patient day during the past fiscal year. Non-residents will be charged at this rate. Admission of non-residents shall be on application to the superintendent of the state department of health and the superintendent of the state sanatorium. Money paid for the care of non-resident patients is to be deposited to the Local and Endowment Fund of the state sanatorium.

KANSAS LAWS, RULES AND REGULATIONS CONCERNING THE ISOLATION OR QUARANTINE OF TUBERCULOSIS PATIENTS

1. Tuberculosis is hereby declared to be an infectious and communicable disease, dangerous to the public health.

—Communicable and Other Reportable Diseases—
Page 132 3.202—65-105

2. Any municipal or county board of health or health officer having knowledge of any infectious or contagious disease, or of a death from such disease, within their jurisdiction, shall immediately exercise and maintain a supervision over such case or cases during their continuance, seeing that all such cases are properly cared for and that the provisions of this act as to isolation, restriction of communication, placarding, quarantine and disinfection are duly enforced. The local board of health or health officer shall communicate without delay all information as to existing conditions to the State Board of Health. Said health officer will confer personally, if practicable, otherwise by letter, with the physician in attendance upon the case, as to its future management and control, and with the authorities of the place as to their duties in the premises.

—Communicable and Other Reportable Diseases—
Page 7 65-119

3. By isolation is meant the separating of persons suffering from a communicable disease, or carriers of the infecting micro-organism, from other persons, in such places and under such conditions as will prevent the direct or indirect conveyance of the infectious agent to susceptible persons.

—Communicable and Other Reportable Diseases—
Page 30 -9

By quarantine is meant the limitation of freedom of movement of persons or animals who have been exposed to communicable disease for a period of time equal to the longest usual incubation period of the disease to which they have been exposed.

—Communicable and Other Reportable Diseases—
Pages 30 - 10

4. The legislature has declared tuberculosis to be an infectious and contagious disease, and has prescribed certain restrictions, with penalties for violations, for persons afflicted with this disease, and those who attend them.

It is hereby ruled that when, in the opinion of the State Board of Health or its representative, or of the local health officer or boards of health, persons afflicted with tuberculosis endanger the public health by continuously and repeatedly ignoring or violating the sanitary restrictions prescribed in accordance with the instructions of the legislature, the local board of health officer shall place such persons and household under complete isolation or quarantine and shall placard the premises in such manner that the public may be warned against the presence of the disease in such person or households.

It is hereby further ruled that the place of quarantine, for such individuals infected with tuberculosis and endangering public health, may be designated by the State Board of Health, its representative, the local health officer, or the local board of health.

—Communicable and Other Reportable Diseases—
Page 97 -11.317- footnote

5. All persons sick with smallpox, cholera, scarlet fever, diphtheria, epidemic cerebrospinal meningitis or any contagious or infectious diseases dangerous to the public health shall be thoroughly isolated from the public and properly quarantined.

—Laws, Rules and Regulations—
Page 10 3.305—65-120

6. Any person violating or refusing or neglecting to obey any of the rules and regulations or procedures made by the state board of health for the prevention, suppression and control of dangerous, contagious, infectious or communicable diseases, or who shall leave any pesthouse or isolation hospital or quarantined house or place without the consent of the proper health officer having jurisdiction, or who evades or breaks quarantine or knowingly conceals a case of contagious, infectious or communicable disease, or who removes, destroys or tears down any quarantine card, cloth or notice posted by the attending physician or by the health officer or by direction of a proper health officer, shall be guilty of a misdemeanor and upon conviction thereof shall be subject to a fine of not less than 25.00 or more than \$200.00 or to imprisonment in the county jail not to exceed ninety days, or to both fine and imprisonment.

—Laws, Rules and Regulations—

Page 12 3.315—65-129

7. For the protection of the public health, and the control of tuberculosis, any person, resident or nonresident of Kansas, who has been diagnosed or is reasonably suspected of having tuberculosis, who shall refuse hospitalization of treatment for such disease in any hospital, house, room or other place for treatment and observation, may be quarantined by order of the officials* designated in this section in the state sanatorium and such person quarantined in the state sanatorium shall remain there until such time as he or she may be released therefrom by the superintendent. Any person quarantined in the state sanatorium by order of the health official as herein provided shall be maintained at the expense of the state.

—House Bill No. 325 — Section 2—

- * Local or state health officer or a representative of the state health officer.

SUBCOMMITTEE ON MATERNAL AND CHILD WELFARE

As to a report on Maternal and Child Welfare, all I can say is that a State Committee for mid-century White House Conference for Children and Youth has met several times at Pierre and Sioux Falls and are studying special problems of South Dakota children.

I am representing the American Academy of Pediatrics and South Dakota Medical Association on this Committee.

Goldie E. Zimmerman, M.D.
Mary Schmidt, M.D.
J. M. Butler, M.D.
R. E. Van Demark, M.D.

COMMITTEE ON NECROLOGY

The Committee on Necrology wishes to report the death of the following members of this Association and those physicians who were not members of the Association during the past year.

E. B. Hultz, M.D., Hill City, South Dakota, passed away July 2nd, 1949. The cause of Dr. Hultz's death was a cerebral hemorrhage.

O. C. Erickson, M.D., Sioux Falls, South Dakota, passed away July 30, 1949, following a sudden illness.

J. S. Bates, M.D., resident of Clear Lake for thirty years, died February 2, 1950.

William Lowe, M.D., Lake Norden, South Dakota, passed away November 14, 1949, at the age of 88. Dr. Lowe was a former member of the State Board of Medical Examiners.

Park B. Jenkins, M.D., Waubay, South Dakota, died February 5, 1950, in the Sisseton Hospital. Death was believed caused by a stroke.

Jesse Smith, M.D., Sioux Falls, South Dakota, passed away in the early part of 1950.

W. R. Ball, M.D., Mitchell, South Dakota, passed away in 1949.

J. A. Nelson, M.D.
G. E. Whitson, M.D.
R. A. Weber, M.D.

COMMITTEE ON MEDICAL BENEVOLENCE

There has been no meeting of this committee. The funds consist of the items. (1) Money in the Savings Account at the Madison Branch of the Northwest Security National Bank of Sioux Falls in the amount of \$988.18, and (2) 13 Series F. Bonds with cash value of \$2,099.16 and maturity value of \$2,250.00. These bonds are deposited in the Secretary's personal deposit box in the afore mentioned bank. A detailed account of the additions to the fund during the past year follows. There have been no expenditures.

Balance on hand May 1, 1949 \$2,585.22

May 10, 1949

Sioux Falls District Auxil. 57.00

May 16, 1949

S. D. State Medical Ass'n
1947 & '49 300.00

May 20, 1949

Yankton Auxiliary 17.00

Aberdeen Auxiliary 1.00

June 6, 1949

Black Hills Auxiliary 15.00

Mitchell Auxiliary 1.00

Memorial Mrs. J. W. Bailey 10.00

State Auxiliary 35.00

December 31, 1949

Interest Savings Bonds 10.40

May 1, 1950

Appreciation bonds 55.72

TOTAL \$3,087.34

Saving Account

N. W. Security Nat'l Bank
of S. F. Madison Branch 988.18

Cash Value of Bonds

May 1, 1950 2,099.16

C. E. Sherwood, M.D.

J. C. Hagin, M.D.

Wm. Donahoe, M.D.

COMMITTEE ON MENTAL HEALTH

Reporting the work of the committee on Mental Health, I wish to say that in the fall of 1949 (November), I with two other members of the committee, Dr. F. D. Gillis and V. V. Volin met with the committee of the South Dakota Mental Health Association at the State Hospital at Yankton, South Dakota, where we discussed the functions of each organization and their relations to the other and to the public.

We seemed to be successful in showing that our State Medical Society must take the whole responsibility of caring for patients as soon as such are discovered and legally placed under the care of the State. We were able to show that our Medical Society must and will aid the South Dakota Mental Health Association in developing state-wide clinics for discovering new mental cases both mild and severe, and will aid them in planning both outpatient and hospital therapy.

We told the South Dakota Mental Health Association that it is very important that they, being mostly a lay organization, should take the lead in getting the legislature to appropriate ample funds for carrying on this mental health work. Later,

after inspection, we approved to Governor Mickelson, the fine work of Superintendent F. S. Haas at Yankton.

Respectfully submitted:

E. M. Stansbury, M.D.
F. D. Gillis, M.D.
R. J. Quinn, M.D.
V. V. Volin, M.D.

COMMITTEE ON RHEUMATIC FEVER AND HEART DISEASE

This committee has no activities to report. Anticipated request for survey of Rheumatic Fever patients has not been received from the American Heart Association.

The chairman has been requested to attend the general assembly of the American Heart Association in San Francisco June 24, 1950, as a delegate at large from this area. If a request for such a survey develops at this meeting it will be turned over to next years committee.

John L. Calene, M.D.
T. H. Sattler, M.D.
M. P. Merryman, M.D.

REPORT ON THE COMMITTEE ON DIABETES

The committee on Diabetes is a new committee in our State Medical Association. Arrangements were made for the committee only a year ago. Since the Committee is new it was first necessary to set up an organization. Extensive correspondence was undertaken and many contacts were made. The officers of the American Diabetes Association, Inc. were consulted and many helpful suggestions were received from them.

Letters were written to the officers of each of the twelve district medical societies in the state. It was suggested to them that they appoint or elect a diabetes committee to act for each district society. Ten of the twelve districts complied with this suggestion.

In September a meeting of the Committee was held in Huron. The work which had been accomplished was discussed and future plans were made. It was considered important that South Dakota join in the Diabetes Detection Drive which was to be nation-wide. A report of the meeting appeared in the October 1949 issue of the South Dakota Journal of Medicine and Pharmacy. The American Diabetes Association provided a diabetes detection drive kit to each of the district diabetes committees which gave full instructions how to prepare for and to conduct the Diabetes Detection Drive Week of October 10th to 16th, 1949.

Of course, the activities and the intensity of the search for unknown diabetics in South Dakota varied from district to district. That could be expected since we were all new in this special effort. Newspaper publicity was sought and obtained. Radio and other public talks were given. A motion picture illustrating the good results of the proper treatment of diabetes was shown. All of these efforts were in the interest of known and unknown diabetics.

The Committee made arrangements for the film

entitled THE STORY OF WENDY HILL to be shown at the current Annual Meeting of the State Medical Association. An exhibit entitled PROGRESS IN DIABETES was ordered for display at the Meeting.

Diabetes Detection Week this year will be from November 12th to November 18th. Letters have been sent to all of the district medical societies suggesting that district society diabetes committees for 1950 be selected as early as possible in order that the work of diabetes detection may be begun earlier this year. However, diabetes detection should be a continuous effort and made throughout the year and not be limited to one week alone. It is suggested that we all urge upon each of our patients the importance of having a general examination every year. This plan would lead to the early discovery of unknown diabetes as well as other unsuspected disturbances of health among our patients and the public in general.

C. F. Morsman, M.D.
B. T. Lenz, M.D.
J. W. Donahoe, M.D.

REPORT OF THE GRIEVANCE COMMITTEE To the Council

The American Medical Association informs us that eighteen state societies now have Grievance Committees on a statewide basis. The most of them are formed after the Colorado plan. They differ from the Colorado plan, however, in that most of them have five past presidents of the association to serve on the committee, rather than having the members elected by the house of delegates and consist of twelve members as the Colorado Society does.

The American Medical Association passed a resolution urging all state societies to establish Grievance Committees.

The Colorado State Society came to the conclusion that there was no medical society agency to which a dissatisfied patient could appeal or complain. Going to court was his only resort. This same difficulty applies in South Dakota. They felt, through a public opinion poll, that the public considers the doctors as a clique and felt that they were inclined to whitewash their incompetence and unethical conduct.

To satisfy this need the Medical Society of Colorado established a twelve man grand jury type of board to: (1) Receive complaints from anyone — doctors, laymen, hospitals, organizations, medical societies, staff members — about any dissatisfaction in the medical field. (2) Investigate facts in the case. (3) Attempt to mediate the dispute and affect a settlement which is mutually satisfactory to complainant and defendant. (4) If necessary, prosecute the case before a proper judicial body. (5) Carry on a continuous inter-society educational program on medical ethics in patient relations, primarily through personal appearances of board members at county society.

The Colorado Board is elected by the house of delegates and it is composed of twelve doctors no more than one of which may be from any one dis-

strict. They found from experience that the membership is highly important. Those elected, the Colorado officials say, must be above reproach in conduct, fearless but fair, and willing to give liberally of their time. It is especially important to have a strong chairman who knows right from wrong and will "stick to his guns."

This is the way the Colorado Board of supervisors functions: a patient feels his doctor has overcharged him — he complains either in person or in writing to the board — the secretary of the board replies inviting him to appear before the board and assures him that his complaint and appearance will be kept in strict confidence.

The chairman will usually assign one or two board members to conduct an investigation into the facts. They interview everyone necessary to obtain both sides of the story including the defendant doctor who is also invited to appear before the board.

In most cases no disciplinary action is necessary. If the doctor's fee is justified the board explains to the patient the reasons for the charge. If the doctor has overcharged, the board recommends a fair fee to him and suggests to the patient that he contact the doctor to talk over and settle the bill. If a patient is still not satisfied, he is to notify the board. This notification has happened only in two cases.

Thus the confidential investigation by the board not only satisfied the patient's complaints, but it serves to protect doctors against unjust charges and the bad publicity that often accompanies that.

After investigation, however, if any of the board members feel that discipline is necessary, the full board meets to consider the case and further action is determined by vote. The board itself never disciplines a doctor. It may advise and recommend but if stronger action is indicated, the board prosecutes the case before a judicial body: the board of censors of a component society, the state medical board of counsellors, the state board of medical examiners, or any criminal court. In this way the board takes the burden of investigation and prosecution off the individual doctors.

The Colorado Board has found itself to be very useful in ironing out patient-doctor difficulties and also in ironing out some hospital-doctor frictions which have developed.

The Colorado officials credit much of the board's success to the completely confidential nature of the investigation. No one is allowed to attend board meetings except elected board members and the witnesses being heard. If it becomes necessary to take verbatim testimony, a certified shorthand reporter is employed, never a member of the society staff. All records are kept under lock and key. In addition, members never sit in on cases dealing with doctors from their own district. This provision plus its statewide membership enables it to avoid the family circle handicap of county society committees.

Colorado's stringent self-discipline has gone over big with the press and the public. Internally it increases the respect of the doctor for the medical

society and their profession. All in all, the board of supervisors is described as the biggest public relations job the Colorado society has ever done.

The president of the Oklahoma State Medical Society has this to say about their Grievance committee. "The response which we have received in the form of letters from the lay public, newspaper articles, columnists, and editorial comments and the attitude of the medical profession has convinced us without a doubt that the columnists and laymen alike have hailed the move with great enthusiasm." It is the most forward step taken by the association in a generation pointing to it as a practical means of combating socialized medicine.

The president of the Oklahoma State Medical Society went on to give us a lot of quotations from various newspapers regarding their venture; and they certainly were all good.

After reviewing the Grievance committees of Oklahoma, Colorado, Nebraska, and California your committee feels strongly that South Dakota should have such a committee. The question as to the exact type of set-up that we wish to have must be left to the council to decide. There are two main types that have been organized as far as we can find — One, being Colorado type with twelve men on the board; and they feel that it is important because board should be large enough to eliminate personalities in any action that the board itself takes. Second, they feel that no two members from any one county or district society should be on it. Then the other type is the one with five past presidents serving. This latter type seems to be the one adopted by most states.

Then the question comes up as to whether to set up changes in the constitution and by-laws of the state society to include such a group or whether to just give them wide discretionary powers on the basis of a vote of the house delegates. Colorado has definite constitutional provisions for such a society with the definite rules laid down for it. Nebraska does not have; and feels that they have accomplished more by leaving the thing open in general terms and merely giving the board its authority through vote of the house delegates. They feel that it is possible to curtail the actual actions of the board by setting up definite constitutional limitation.

Then the question must be decided as to bringing a definite outline of procedure, etc. before the house of delegates or whether to discuss the question and have them vote in such a Grievance Committee itself set up its own rules and regulations to be presented later for adoption.

G. E. Whitson, M.D.

B. T. Lenz, M.D.

C. R. Stoltz, M.D.

REPORT OF REFERENCE COMMITTEE ON GRIEVANCE COMMITTEE

A resolution is offered for the establishment of a temporary Grievance Committee, consisting of 5 past presidents of the State Association. The purpose of the committee is to investigate complaints and/or initiate investigations of professional

conduct or ethical deportment. This temporary committee will prepare and present for consideration at the next Annual Meeting, rules and regulations for a permanent committee.

Your committee realizes the many difficulties which can develop as a result of the passage of this resolution and fully appreciates the many problems which can ensue. However, it feels that this measure is a necessity in the immediate enactment and operation will infinitely improve public relations. The responsibility delegated to the men appointed to this newly formed committee are required to give unselfishly of their time and energy. Though settlement may not be possible in all cases the actual establishment of this committee will tend to diminish the number of possible future claims.

I move that the South Dakota State Medical Association form a Grievance Committee, composed of 5 past presidents to act as the associations "grand jury," to investigate complaints and/or initiate investigations concerning professional conduct and ethical deportment.

²This committee shall be appointed by the executive committee subject to approval by the council and by the House of delegates except that the grievance committee for 1950-51 shall be appointed subject to the approval of the council.

³This grievance committee shall prepare and present to the next annual meeting appropriate amendments to the by-laws to regulate the procedure of a permanent grievance committee.

George E. Whitson: Chairman

SPECIAL COMMITTEES REPORT OF EDITORIAL COMMITTEE

During 1949 the South Dakota Journal of Medicine and Pharmacy published fewer Scientific articles than the previous year but more editorials. A new department, "Cuff Notes" was inaugurated in the September issue, edited by D. H. Manning, Sioux Falls. He would welcome suggestions regarding material or presentation. The Editorial Committee again urges South Dakota physicians to submit more Scientific articles and Clinical Case Reports for publication in our Journal. This will increase the interest of our readers as well as being of much value to the authors themselves.

We would also appreciate hearing from Secretaries of District Medical Societies regarding meetings of their societies and news items of interest to South Dakota physicians. It has been suggested that at least one article concerning Political or Socialized Medicine or Medical Economics be published in every issue and also that a page or more be devoted to news and publications of the staff of the Medical School.

Any other suggestions for the improvement of our Journal will be gratefully received by the Editorial Committee. After all, it is not the job of only a few but it will take the cooperative efforts of the entire medical profession in South Dakota to make our Journal a success. So please heed our appeal for Scientific articles, Clinical Case Reports,

news items, editorials and suggestions for improving our Journal.

R. G. Mayer, Chairman
Donald Slaughter, M.D.
H. R. Lewis, M.D.
C. B. McVay, M.D.
G. J. Van Heuvelen, M.D.
D. A. Gregory, M.D.
H. Russell Brown, M.D.
H. P. Adams, M.D.
C. F. Morsman, M.D.
M. P. Merryman, M.D.
D. H. Manning, M.D.

COMMITTEE ON MEDICAL LICENSURE

Your Committee on Medical Licensure reports that at the July, 1949, meeting, fifteen doctors were licensed to practice medicine in South Dakota by reciprocity, and four by examination. At the January, 1950 meeting, thirteen were licensed by reciprocity and seven by examination.

Lyle Hare, M.D.
J. D. Alway, M.D.
F. F. Pfister, M.D.

REPORT OF COMMITTEE ON VETERANS ADMINISTRATION AND MILITARY AFFAIRS

The committee feels that we cannot passively disregard present methods of warfare because of our isolation, but must realize that although we are not actually bombed, people seeking refuge will infiltrate into this state carrying radioactive contamination with them and exposing the entire population of this state.

1. In line with this we offer complete cooperation with State and Federal Civilian Defense plans, and suggest that definite and positive plans of action be established. We also advise that the Superintendent of the State Board of Health and the Dean of the College of Medicine be appointed to organize and outline an emergency medical plan for the State of South Dakota, and to keep the members of the South Dakota Medical Association informed of all new technics and advances.

2. We urge all eligible reserve physicians to attend special service schools in modern and atomic warfare so that we may have a pool of trained physicians to direct the emergency medical care in case of disaster. Physicians on completion of such courses should register with the head of the Emergency Medical Care Plan.

3. We urge the several colleges and universities of the state to train personnel in the use of the various counters and instruments necessary to determine radio activity, and that such technical supplies be procured and stored in several centers throughout the state.

4. In as much as blood transfusion is the main life-saving measure, it is urged that all local and county societies stimulate interest in building local blood banks and the blood grouping and registration of all inhabitants.

5. When and if approved by the House of Delegates, request a copy of this recommendation be sent to the Governor for his information.

We endorse the Report of Reference Committee on Insurance Plans and Medical Service of the American Medical Association, which is as follows:

"Your committee agrees that the veterans entitled to medical care for non-service-connected disabilities, as defined by the Congress, should be cared for by existing civilian facilities. This is in accord with the report of the Hoover Commission. Your committee feels that regardless of the Veterans Administration hospital construction program it will be impossible to provide hospital care in all communities. However, hospital facilities are available in many communities. Veterans in this category should be allowed to enter local approved hospitals of their choice. Such an arrangement will eliminate inconvenience to the veteran and also continue a high standard of medical care. Your committee believes that the Veterans Administration hospital construction program under the Hill-Burton Act and with civilian hospitals. This may well result in disastrous weakening of our entire hospital system.

"Your committee further believes that veterans should be allowed free choice of physicians. The committee recognized the extreme importance of this whole problem, and its many implications. The committee believes that it is impossible in the short time available to a reference committee to deal judiciously with this problem to make specific recommendations.

"Your committee therefore recommends that a special committee, under the jurisdiction of the Council on Medical Service, be appointed and activated without further delay; that this committee be instructed to confer with the several veterans' organizations, hospital organizations, the Veterans Administration and other interested groups, with the view toward formulating a program to care for veterans in this category, and that a report be submitted to the House of Delegates at its next Annual Session."

Respectfully submitted:

L. C. Askwig, Chairman
F. F. Pfister
M. R. Gelber
T. J. Billion

SPAFFORD MEMORIAL FUND

The Spafford Memorial Fund for higher achievement in Latin was awarded to Warren Dirks, Harrisburg, South Dakota. our committee recommends acceptance of this report.

J. C. Ohlmacher, M.D.

REPORT OF THE COMMITTEE ON RADIO BROADCASTS

The committee has continued the series of broadcast transcriptions furnished by the American Medical Association as has been done for the past several years. These broadcasts are made as a public service feature by Station KSOO in Sioux Falls.

A similar series has been and is being broadcast by Station KOTA in Rapid City, and in addition

to this service, that station is cooperating with the doctors and druggists of that City to present a commercially prepared series for a period of 26 weeks or more.

Similar AMA transcriptions have been used by WNAX of Yankton in cooperation with the medical men of that area.

Station KUSD, the station of the University at Vermillion, has presented a series of "live talent" health broadcasts in which a number of organizations interested in health affairs participated. Our Executive Secretary helped arrange for two of these, one on "Self-Medication" and another on "Quacks and Quackery." In addition to Mr. Foster, Dr. Hugo Andre of Vermillion appeared on these shows, and the series won national recognition for this type of broadcast.

The plan previously O.K.'d by the State Association for five minute talks by South Dakota Physicians has begun to take form, in that six recordings by Rapid City doctors and six by Aberdeen doctors have been made, and others are in process.

The Ronning Drug Company of Sioux Falls has been sponsoring a series of broadcasts entitled "This is Your Doctor" as a part of their advertising, that seem to be well accepted by the public. They are a definite plea for leaving the medical profession alone in its effort to take care of the sick and not to saddle socialized medical supervision onto the profession.

The Radio Committee congratulates the communities and businesses that have taken an active part in making medical broadcasts possible, and expresses the thanks of the Association to them and to the Stations that have been so cooperative.

We recommend that the Executive Secretary's office send to each cooperating station a brief note of thanks.

It is possible that we have missed some recognition where it was due. If any omissions are called to our attention, we wish to incorporate them in this report.

L. J. Pankow, M.D., Chairman
J. C. Rodine, M.D.
M. C. Jorgenson, M.D.

REPORT OF THE COMMITTEE ON PREPAYMENT AND INSURANCE PLANS

Since reporting to this House of Delegates of the 1949 Annual Session, your Committee has met formally on four occasions. Many other informal meetings have been held by members of the Committee with representatives of Blue Cross and private insurance companies, who are interested in cooperating with this Association.

On December 31, 1949, 14,542 individuals were enrolled in the South Dakota Injury-Illness Expense Plan. On December 31, 1948, the enrollment figure was 5,930. Thus during the year 1949, our enrollment more than doubled. The annual premiums paid into the Plan increased from \$130,000 in 1948 to \$274,000 in 1949. The losses incurred rose from 97,268 in 1948 to 187,600 in 1949 (approximate figures). The overall loss ratio to premiums earned from inception of the Plan in February of 1947 to

December of 1949, was 85.85%. This loss ratio figure has increased 0.5 of 1% during the year of 1949.

It will be evident from the foregoing that definite progress is being made in insuring people against the expense of medical and hospital care. The figures given in the previous paragraph, include only those covered by the South Dakota Plan, as written by the St. Paul Mercury Indemnity Company. Not included are those people covered by Blue Cross and the many other private insurance companies which are writing this type of coverage.

After lengthy deliberation your Committee voted to bring certain specific recommendations to this House of Delegates, as follows:

(1) That this Committee be authorized to change the South Dakota Plan to provide for hospital confinement more than the \$5.00 per day now allowed;

(2) That changes be authorized to increase the amount allowable for "other services and supplies" in the hospital, which amount is now \$50.00 for each injury or illness;

(3) That the South Dakota Injury-Illness Expense Plan be liberalized to include endorsement of policies similar in scope of coverage and cost although not identical with the present policy, and that this Committee be empowered to make such endorsement at its discretion. Final action to be in hands of council.

(4) That this Committee be empowered to modify the original agreement forms which grant our endorsement so that they will conform with and accomplish the purpose of the foregoing recommendations;

(5) That a study be made to determine so far as possible from Blue Cross and other insurance companies the actual number of South Dakota people who are covered by hospital, medical and surgical insurance protection.

Respectfully submitted,

H. Russell Brown, M.D., Chr.
R. G. Mayer, M.D.
R. E. Jernstrom, M.D.
C. E. Sherwood, M.D.
T. Reul, M.D.

THE COMMITTEE ON NATIONAL LEGISLATION

Never in the history of the United States has there been such a deluge of bills pertaining to health and its various ramifications. Never has the American doctor been more mixed up in politics, and that is what it apparently takes.

The first great battle was over the Reorganization Bill No. 1, creating a welfare state under the direction of Oscar Ewing, Federal Security Administrator, who would then have cabinet status. This was defeated. The barrage of letters and telegrams to the members of the United States senate played no little part.

Since then many minor bills have come up, but no major legislation passed, nor does it seem likely to do so in this term of Congress. However, the proponents of this action are far from licked, and

will continue to fight for some type of legislation. It is up to us to see that this is not accomplished. It is not up to us to oppose candidates who come up for election, but we can vote for those who will look after our welfare. This is an all out battle, and busy doctors cannot take the time, nor do they have the know-how to fight this type of battle, but the American Medical Association has a very efficient team in Whitaker and Baxter, who are doing a grand job carrying the issue to the people, who after all, will decide. This costs money, and that is where the \$25.00 American Medical Association dues go — cheap for what we get in return and savings in our own time. We should all send in our contributions and improve our already very good record of over 80 per cent this past year. Never can we invest money better if we wish to see the American way of medical practice continue.

A strong National Legislative Committee for next year is advised, as very vital legislation will come up.

W. H. Saxton
C. E. Robbins
H. R. Brown
R. G. Mayer
L. J. Pankow

COMMITTEE ON RURAL MEDICAL SERVICE

On February 2, 1950, I attended the meeting of the Committee on Rural Medicine of the American Medical Association in Kansas City. This was a preliminary meeting to discuss what had been done in other states by our rural health committees. There was a general open discussion where helpful hints were exchanged to see how we could better our rural health facilities in the various states. On the 3rd and 4th of February, we attended the Fifth National Conference on Rural Health. This year's motto was "Let's do Something About It." It was certainly heartening this year, as step by step, there was more determination to have the local communities study their medical problems to find out what they needed, and to make the effort to do something about it with their own resources. This was a far cry from what it was 4 or 5 years ago, when the conferences were first started. There was a tendency at that time to see what the federal government could do.

In spite of the tremendous amount of pressure brought to bear by various federal agencies to promote a system of compulsory health insurance and federal aid to struggling medical institutions, it is encouraging to find that the people are not willing to give up their freedom and initiative to do something for themselves. This is in spite of the fact that the federal taxation has diverted so much of the state's money to make it almost impossible to build their own roads without help, or to build or maintain medical schools. The people should awaken to the fact that if the federal government did not tax so much out of South Dakota, and only return 38% for all purposes, we could maintain our own economy and make great progress.

The last real true picture of the medical situation

in South Dakota has been on studies which were done between 1940 and 1945. It is the hope of this committee to give a true picture, up to date, of the hospitals, medical, nursing, dental and medical educational facilities in this state.

A. P. Peeke, M.D.

M. M. Morrissey, M.D.

G. J. Bloemendaal, M.D.

REPORT ON COMMITTEE ON MEDICAL SCHOOL AFFAIRS

Your committee on Medical School Affairs during this present fiscal year has been busy, as usual. As Chairman of the Committee, I should like at the outset to commend the members of the Committee, your executive Secretary and Mr. Karl Goldsmith for their unalterable support, excellent service and unstinting loyalty to the cause of medical education in South Dakota. In my opinion, the practicing physicians who make up this committee have done more to improve and perpetuate medical education than any other group.

About a year and a half ago Governor George T. Mickelson, meeting with your committee on Medical School Affairs, suggested that a plan should be worked out whereby the physicians of the state would produce tangible evidence of their sincere interest in furthering medical education. In order to accomplish this objective, the South Dakota Medical Endowment Association was formed, under the auspices and counsel of Mr. Karl Goldsmith. The pertinent philosophies of this Association were tentatively approved at a meeting of the Medical School Affairs Committee held in Huron on 17 September, 1949. Present were: Chairman, Slaughter, members Pankaw, Williams, Saxton, McVay, Brown and Executive Secretary Foster. As a result of this, a certificate of incorporation was issued by the secretary of the State of South Dakota on November 10th, 1949.

At the above mentioned meeting, Dr. L. J. Pankow brought up the subject of procurement of dogs for the medical school. This matter has become of extreme importance and your committee wished to respectfully suggest that a discussion on the floor of the House of Delegates be made at the state meeting to be held in Huron in 1950. Also, in the September meeting it was announced that representatives of the AAMC and AMA would make an official inspection and survey of the University Medical School on 28, 29 and 30 September. At this point it can be stated with considerable pride that the inspection resulted in restoration of the medical school of the University to full status. It is the opinion of your chairman that a large measure of restoration to fully approved status is due to the help of the physicians of the State of South Dakota.

Also at the September meeting the Committee on Medical School Affairs respectfully requested the Council of the State Medical Association to designate the Committee on Medical School Affairs as an advisory Board to the administration of the Medical School relative to matters pertaining

thereto. This recommendation was accepted by the Council at the meeting of 18 September.

On Sunday A. M., 18 September, the Committee on Medical School Affairs further discussed the Endowment Association tying in certain details which had been omitted for lack of time at the meeting held in the P. M. of 17 September.

On the 28th day of January, 1950, the first meeting of the members of the South Dakota Medical School Endowment Association, who are in essence the Committee on Medical School Affairs plus Dr. Faris Pfister representing the council, met with the following present: Brown, Pankow, Saxton, and Slaughter. Upon proper motion Dr. H. Russell Brown was called to the Chair and Dr. Donald Slaughter was duly appointed Secretary of the meeting. At this time the Charter of the corporation and a copy of the Articles of Incorporation were presented and upon motion ordered accepted and filed with the records and files of this corporation. Subsequently, the by-laws of the Association were submitted for consideration and upon motion were duly adopted as the by-laws of this corporation.

Upon motion, duly seconded and carried, the members then by ballot selected Doctors Brown, McVay, Pankow, Pfister, Saxton, Williams and Slaughter directors in said Association. Upon motion the meeting adjourned.

Also on the 28th day of January, 1950, a meeting of the Directors of the South Dakota Medical School Endowment Association was held in Huron, South Dakota. Present were Brown, Saxton, Pankow and Slaughter.

Upon motion duly made, seconded and carried, William H. Saxton, was elected President of said Association.

Upon motion duly made, seconded and carried, Faris Pfister was elected Vice President of said Association.

Upon motion duly made, seconded and carried, Donald Slaughter was elected Secretary of said Association.

Upon motion duly made, seconded and carried, Donald Slaughter was elected Treasurer of said Association.

At the Directors meeting noted above it was decided to ask prominent laymen and physicians to become Associate members of the Endowment Association. Consequently, after due process the following persons have accepted Associate membership on the Board of Directors: Governor George T. Mickelson; Robert Lamont, Aberdeen; Guy Harvey, Yankton; Guy Bjorge, Lead; Joe Messer, Watertown; Doctor Frank S. Howe, Deadwood; Doctor Lyle Hare, Spearfish; Doctor George T. Jordan, Vermillion; Doctor George Stevens, Sioux Falls; Doctor E. A. Pittinger, Aberdeen, and Doctor T. F. Riggs, Pierre.

Your Committee believes that the formation of this Endowment Association is one of the most forwardsteps which can be made or has been made to further medical education. Already a check of \$500.00 given by Mr. Bryon L. Sifford of Sioux City, Iowa, has been received and it is to be sin-

cerely hoped that physicians of the state and their parents will see fit in the near future to either make direct gifts or to set up annuities and/or life insurance policies for the benefit of the Endowment Association.

For completeness and for importance, copies of the by-laws and the Articles of Incorporation are herewith attached as well as a summary of the findings of the improvements which were noted when the medical school was officially inspected. At this point it should be emphasized that we have not reached the maximal heights which are necessary to continually improve the medical school at the University of South Dakota. It is to be hoped, however, that with the excellent commencement of the progress supported by your Committee that we shall continue to go forward.

Respectfully submitted:

H. Russel Brown
C. B. McVay
L. J. Pankow
William H. Saxton
F. R. Williams
Donald Slaughter, Chairman

OUTSTANDING IMPROVEMENTS OF THE UNIVERSITY OF SOUTH DAKOTA SCHOOL OF MEDICINE

1. Increase in number and quality of staff.
2. Appropriation of funds for a new building.
3. A greatly increased staff interest in research.
4. Marked development of graduate program.
5. Improved integration of School into State health program.
6. The initiation of interesting experiments in establishing an undergraduate virology course and a second year preceptorship.
7. The establishment of improved arrangements for transfer of students to their third year in high grade four year schools.
8. Improved relationship with arts colleges sending their students to medical school.
9. Greatly improved library.

TO THE OFFICERS AND MEMBERS OF THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

Report of the Committee on Nursing Training

Recruitment is being carried out on a National, State, and local plane. National is organized under "Committee on Careers in Nursing," 1790 Broadway, New York 19, New York. Suggestions are sent out by this committee, for example: May, 7th has been proclaimed "American Student Nurse Sunday," Student Nurses are attending Mass and Church Services in uniform, pastors are being contacted to speak on Nursing that day. This is being done on a National, State and local level.

Then in our State of South Dakota the Public Health Nurse from a School of Nursing in the vicinity spoke on Nursing in the High School to interested boys and girls. The superintendents of the schools were contacted by the Executive Secretary of the State Nurses Association (Miss Myrtle

K. Corcoran, Mitchell, South Dakota) and her committee. The State was divided into distinct areas, then each school was contacted as to definite day and date. Visits were then made. Enrollment is on the increase.

The teaching hours remain the same but there is more stress on integration of teaching and clinical teaching at bedside. Students now have a months vacation yearly and class hours included in their eight hour day.

There is an insidious trend to try to put all Professional Nursing into University Schools, which should be combated if patients are to receive the individual care they should. (Naturally Federal aid is associated with this). We must keep our three year schools. In the pattern of Nursing Education there should be a place for the College Graduate Nurse, the diploma Registered Nurse, and the licensed Practical Nurse.

D. A. Gregory, M.D.
J. A. Eckrich, M.D.
R. E. Lemley, M.D.

COMMITTEE ON WORKMAN'S COMPENSATION

There has been no additional work since the work of last year on the suggested fee schedule.

There is a feeling on the part of the committee and members of the Association at large that definite steps should be taken at this legislative session to get legislation through to increase liability limitations on compensation cases and to increase it to a point of unlimited liability. It is felt that if an employer is liable at all, that he should be liable for all danger which employee sustains. We feel an increase should be made in compensation to injured employee. We want something definite to turn over to the legislative committee at the time of the legislature.

L. J. Pankow, M.D.
W. A. Arneson, M.D.
H. B. Shreves, M.D.

PRESIDENT'S ADDRESS

As provided by the by-laws, it is necessary for the president to make an annual address. For this, I ask your indulgence.

Well within the memory of most of we older practitioners, and by tradition to the younger men, has the position of the doctor been a most enviable one. Second only to the pastor or priest in a community has the doctor been the physical, moral, and even the religious consultant of his following, and without danger of contradiction, he has not violated that trust, except in isolated instances, as all humans may do.

In that period of respect and of free enterprise, tremendous steps have been taken for the public welfare. Never have so many people had such good medical care as Americans enjoy. Since the turn of the century the span of life has been increased about twenty years, so that today it will average about 67 years. This has been accomplished by the tireless efforts of the medical profession in conquering disease, better care of the

new born and its kindred difficulties, better hygiene, better diet, teaching the people to anticipate their illness before it strikes. Today the rate of progress for the fight for life has reached such a point that it is not disease, but accidents that lead the list of killers.

Now there is a movement to scrap all this and put it entirely under federal control, headed by a lay person at that. This movement started a little over a year ago, in January of 1949. The outlook was dark and the threat was serious and immediate. We stood practically alone to oppose this legislative blitz. Our offices in Chicago were just opened and not sufficient time has elapsed to do much planning, but by hard work and sacrifice of their own time, our officers were able to turn back this first wave. Today the picture is very different — much brighter and hopeful. Never have the nation's doctors been so closely knit together and are taking their fight to the common people. Gone is the "retired seclusion" and we realize we must take up politics or it will take us up. Now why the trouble?

The answer is not entirely clear in my mind, but it seems to add up to several conclusions. First, the general trend of some leaders today to take the initiative away from the individual and make a welfare state. Second, we may be at fault in some instances, because of an unequal distribution of doctors, thus making instances of inadequate care. Also, the trend of specialization takes too many away from the bedside care the people need so badly, or in other words, the family doctor. We realize the health of our people could be better, but medical knowledge will have to improve before some problems can be met, and that takes time, not legislation.

The subject of health has become so hot that both political parties are toying with it, and we are in between. Let us see what the situation looks like: two planes — administration and a voluntary one. The former I do not need to discuss, as it calls for absolute regimentation of the doctor — that we do not want. We must have a plan to expand and improve voluntary medicine that has been so effective.

Well do we recognize, as does the A. M. A. that federal aid in certain instances has done, and should continue to do, an invaluable service. For instance, the United States Public Health Service is doing work no private doctor or group could ever hope to accomplish. The V. D. program in our larger cities especially is doing a fine job with astounding results; its aid in the fight against tuberculosis; the National Hospital Construction Act that makes it possible for small towns with government assistance to build hospitals, and thus attract doctors to their community — these are some of the activities that have been so helpful in the past and should be continued. From there on out, however, we feel that the responsibility is up to the doctor, and free enterprise is the best way.

First, let us determine the public demand. In a recent poll conducted by several states, both urban and rural, the demand for socialized medicine was

from 10 to 15 per cent, with the teaching profession leading the list. The A. M. A. National Educational Campaign now has the support of over 3,000 national, state, and local organizations which oppose compulsion. These range in membership from a few to 5,000,000, and constitute a cross section of American people: women, veterans, farmers, lawyers, business men, civic and trade groups, fraternal and patriotic groups, dentists, nurses, druggists, hospitals, and physicians.

Then, let us determine the results as found in other countries, of which England is the most recent. It is the consensus of opinion among those who know that it is from a success, very costly — far above all expectation. Harold Stassen, President of U. of Pennsylvania, says; "More medical care of a lower quality for more people at a higher cost." He notes further that the death rate in Britain went up sharply, industrial absenteeism went up, and there was a serious breakdown of hospital and medical care for elderly people. Public health work has been retarded and even abandoned.

We are the healthiest major nation in the world, with unsurpassed standards of medical care, medical education, and research. We have more doctors in proportion to population, and are improving the distribution of doctors and hospitals in rural areas through voluntary progress based on local control.

We in South Dakota have placed nearly 150 doctors throughout the state since V-J Day. We have built many new small rural hospitals, and have encouraged our students to return to our state for general work through our preceptor system in a fuller accredited school. Cooperated in the AMA 12 point program.

It is recognized that there probably is no plan that will function 100 per cent, but already we have over 65,000,000 people covered, and in the next year that will go up to 70 or 80 million. That is a good start on any plan. We recognize that under our present set-up there are some not covered — the low salary group and the indigent. The former are self-sustaining in all ordinary conditions, but are swamped in catastrophic illness or major operations. The indigent are usually subsidized by the state or county.

It has been suggested by party leaders that a comprise plan be set up to cover those people not taken care of by group or industry, and unable to pay for satisfactory complete coverage, by a sliding scale rate. This is not unlike our present fee system, only not quite so crude and more accurate. It, too, might assist those who have to frequent the clinics or county doctors, which they dislike to do intensely; and according to the latest figure this is about 25% of the population. Now, of course, these are not all incapable of paying. Careful budgeting for medical expense, as for food, light, heat, cigarettes should be done. This cuts down the need for federal aid to the absolute indigent to a minimum — far less than coverage for all. Of course, nobody gets all the medical care he needs, we doctors don't know enough to

give that much; but we can give good care that at least 80 per cent can afford. This vast majority of American people can afford adequate care, according to the Brookings Institute, by family budget. This is also borne out by United States Government figures which show that the American people spend several billion dollars more each year for recreation, alcohol, tobacco, jewelry, cosmetics than for medical care. The cost varies with localities, but the national average is about 10 cents per day for individuals, and 20 cents for families. That takes in protection against major hospital, surgical, and medical bills. Of course, the plan is complicated and need much work by actuaries and statisticians, but they are not unsurmountable, and the government aid to enable medical security would be at a minimum. Some say it is so new that it will never work, so was life insurance, industry responsibilities, etc., but educating the people will help, and let's give it a try. Any system must be slow in order not to stifle the present medical facilities; it must stimulate it to grow, but never in excess of medical ability to keep up.

I still am firmly of the belief that the American people are capable of intelligent selection for their own welfare; if not, compulsion or socialism is the answer. Let us try the voluntary way before surrendering our birth right and the right to practice medicine in the progressive, competitive, unhampered, American way. Eternal vigilance against adverse legislation is a good policy, and should be followed through the ensuing year which will be one of the most critical in our history — let us all use our constitutional right and vote. Political American medicine must shake off its lethargy.

Thank you.

W. H. Saxton, M.D.

REPORT OF ABERDEEN DISTRICT No. 1

There are 45 members in the Society. Dues paid up to date. Four dinner scientific meetings were held in the Aberdeen Society this past year. The attendance and interest was fairly good and improving.

Councillor,
J. D. Alway, M.D.

REPORT OF OFFICERS

Watertown, South Dakota
April 22, 1950

Councillor's Report
Watertown District Medical Society
1949-1950

Total paid-up members: 23

Special activities for the year:

1. President for the year 1949, J. H. Crawford, Jr., delivered address at the dedication of the Clear Lake Community Hospital, May 15, 1949.
2. Submitted resolution on revision of Workmen's Compensation Schedules to the State Society.
3. Cooperated with the local schools in providing pre-school physical examinations.
4. Carried out immunization program in cooperation with the local schools.

5. Participated in diabetes detection drive.
6. Sponsored local essay contest in cooperation with the State Society and the American Association of Physicians and Surgeons.

Review of meetings:

May 3, 1949

Members present: 14

Guests: 15

Guest Speaker: Dr. W. M. Norman, Urologist, Minneapolis, Minnesota. Dr. V. S. Meyer, Orthopedic Surgeon of London, England, informally discussed socialized medicine in England following the regular program.

May 17, 1949 (Special Meeting)

Members present: 14

Business Meeting

July 12, 1949

Members present: 16

Business meeting

August 9, 1949

Picnic for doctors and wives at Lake Kampeska.

September 13, 1949

Members present: 16

Guests: 3

Guest Speaker: Dr. George Tangen, Otorhinolaryngologist, Minneapolis, Minnesota.

October 11, 1949

Members present: 15

Business meeting

November 1, 1949

Members present: 15

Guests: 4

Guest speaker: Dr. Asher A. White, Internist, Minneapolis, who spoke on "Political and Social Relationship of Atomic Energy."

December 6, 1949

Members present: 11

Business meeting

January 3, 1950

Members present: 11

Election of officers:

President—Dr. Mary Schmidt

Vice-President—Dr. G. Robert Bartron

Secretary-Treasurer—Dr. Donald Fedt

Delegate: Dr. Thomas Reul

Alternate Delegate: Dr. Rodney Stoltz

February 7, 1950

Members present: 15

Guests: 3

Business meeting (Guest speaker was ill and unable to be present)

March 7, 1950

Members present: 12

Guests: 2

Guest Speaker: Dr. Rayl, Sioux Falls — "Thoracic Surgery."

April 4, 1950

Members present: 18

Guests: 6

Guest speaker: Dr. Chisholm, Pediatric Surgeon, from Minneapolis.

C. Rodney Stoltz, M.D.

Councillor, Second District

REPORT OF COUNCILOR FOR THIRD DISTRICT

The Third District held seven meetings during 1949. On January 27 we met at Flandreau with a program put on by Secretary Foster and a report by Dr. Peeke on the national physicians committee. On Feb. 9 Dr. Tom Billion, Jr., presented a program on coronary occlusion. On April 7 we met in Madison and Dr. Stanley Larson of Sioux Falls presented a program of chest X-ray and diagnosis. On June 9 we met at Arlington. We had an illustrated lecture on the early diagnosis of cancer by Drs. Ferguson and Hunter. On Aug. 11 we met at Brookings, with Dr. Schmidt presenting a program on diagnosis and treatment of infant diarrhea. On Oct. 13 we met at Madison with Dr. Rayl giving a program on chest surgery. On Dec. 9 we met at Volga with Dr. Hans Jacoby presenting a program on X-ray diagnosis.

The total members of the Third District is 29. There had been one new member taken in during 1949. There are two elderly physicians in the district who do not belong to the society.

REPORT OF COUNCILOR FOR FOURTH DISTRICT

Membership of the 4th District Medical Society for the year of 1949 consisted of 18 paid up members and one honorary member. Four meetings were held during the year. The first meeting being for election of officers on January 5th 1949. The balance of the program consisted of routine business. The second meeting was called February 28, 1949. John C. Foster, State Executive Secretary, was present to discuss S. B. #5 which is national Compulsory Health Insurance. Mr. Foster stressed that the answer is Voluntary Health Insurance such as supplied by the South Dakota Plan. The A. M. A. assessment was discussed and the principle recommended by our society. The third meeting was held July 28, 1949. Routine business was disposed of and a sound film on peptic ulcer was presented. Dr. Van Heuvelen discussed the method by which graduates of foreign medical schools might be licenced in South Dakota. The fourth meeting was held November 17, 1949. Routine business was presented and disposed of. An excellent sound film on the early diagnosis of cancer was shown.

Councillor 4th Dist. Med. Soc.
M. M. Morrissey, M.D.

REPORT OF COUNSELOR, 6th DISTRICT MEDICAL SOCIETY

The Mitchell (6th) District was completely ready to entertain the State Meeting in May when disaster struck Mitchell, causing the loss of about half of the much needed hotel facilities. We are all indeed sorry not to be able to complete our plans for entertaining the State Meeting but can assure you that as soon as we have the needed hotel facilities rebuilt, we will be anxious to again make plans for the annual meeting.

The Mitchell District is in excellent physical condition. We have a grand group of enthusiastic

young men who are putting some old pep back into our meetings. Four district meetings have been held this year with numerous interesting speakers.

Our Society sponsored the contest on Socialized Medicine. Sixteen high school students entered the contest with Miss Betty Beittel of Mitchell winning the local prize of \$10.00. The papers were all sent in to Mr. Foster for entry in the state contest.

A short time ago the areas surrounding Corsica and Kimball were approved as emergency areas for displaced physicians.

Our active membership totals 25. We have three honorary members. Five members have not paid their dues to date.

I wish to take this opportunity of thanking all of our local men who worked so faithfully and diligently in getting ready for our State Meeting.

F. Daniels Gillis, Sr., Counselor
Sixth District Medical Society

REPORT OF COUNCILOR FOR SEVENTH DISTRICT

The Seventh District has completed another year of activity. Nine meetings were held during the year. The membership as of December 1, 1949 stood at 91, 12 of whom were members of the Veteran's Administration Facility in Sioux Falls, 4 members are honorary. We report with regret the passing of two members during the past year. The Society at present is actively engaged in forming a Tumor Clinic which we expect will be actively functioning within the coming year.

The present officers for the Seventh District Medical Society are as follows:

President—Dr. C. J. McDonald
Vice President—Dr. D. H. Breit
Secretary—Dr. D. H. Manning
Treasurer—Dr. Paul Reagan

Delegates:

Dr. Geo. Stevens
Dr. John Kittleson
Dr. Don Manning
Dr. C. J. McDonald

Robert E. Van Demark, M.D.
Councillor for the Seventh District

Dr. W. H. Saxton
Huron, S. Dak.
Dear President:

Here is the report on the district activities of the 8th district of the So. Dak. State Medical Association.

The fall meeting of the Yankton District Medical Society was held at the State Hospital on Oct. 20, 1949. The Doctors and their wives were entertained at dinner as guests of Dr. and Mrs. Haas. The Guest speaker for the evening was R. R. Greene, M.D., Prof. of Obstetrics and Gynecology at Northwestern University, and is a member of the staff of Wesley Memorial Hospital, Chicago, Ill. His subject was, "Gynecological Problems and Endocrine Disturbances."

The annual meeting was held at Sacred Heart

Hospital on Dec. 14, 1949. John Foster, our executive secretary, was present and discussed the new A. M. A. assessment of \$25.00 per year and lobbying in Washington. Dr. R. L. Ferguson of Vermillion was in charge on the program which consisted of a symposium presented under Dr. Ferguson's direction. Lunch was served by the sisters.

The spring meeting was held at the Congregational Church, Vermillion, So. Dak. on April 19, 1950. Scientific Program was given by Dr. Donald F. Rayl, of Sioux Falls, So. Dak. Subject: "Carcinoma of the Lung, and Bronchiectasis."

In this district there are 31 paid up members, and 5 who have not paid this year's dues. We have 4 honorary members.

Our treasury is solvent and as far as we know we have no communists among our members.

E. M. Stansbury, M.D.

Councilor for eighth district

COUNCILOR REPORTS BLACK HILLS DISTRICT

Four meetings were held at Lead, Deadwood, Spearfish and Rapid City. The Spearfish meeting was a combined business and social meeting. A trout fish fry was put on by Doctors Hare and Miller. Our Association president was a guest at this meeting. Our meetings were all held in the afternoon due to the long distances necessary to reach the places of meeting. Our membership is almost 100%.

R. E. Jernstrom, M.D.

REPORT OF THE COUNCILOR OF THE TWELFTH DISTRICT

Quarterly meetings were held by the 12th District. Your councilor attended all meetings except the meeting at Sisseton in January 1950.

There are 12 members of the society and all men in active practice are members except 3 men in Sisseton.

Annual election of officers were held at the meeting in Milbank in April, 1950.

D. A. Gregory, M.D.

Councilor, 12th District

GULLIBLE'S TRAVELS

May 27

Attended a 4-state meeting of the Council on Medical Service at the Cataract Hotel in Sioux Falls. Helped make arrangements along with **Mr. Brower** of the Am. Medical Association Council. Left the meeting before dinner in the evening to drive to Grand Forks, N. Dak. to put in a bid for a joint meeting with the N. Dak. State Medical Association next year.

May 29

Appeared with **Dr. Mayer** before the N. Dak. House of Delegates to offer the invitation. Found out later that our bid had been turned down, and there will be no joint meeting.

June 2

Scheduled to speak at a meeting of the S. Dak. Hospital and Home Association, but car trouble stopped me from making the scheduled appearance after getting part way there.

June 8

Attended the Madison-Brookings District Medical Meeting at Madison along with **Drs. Pankow, Myrabo, and King**, all of Sioux Falls.

June 9

Drove to Huron to attend the final meeting of the joint commission conducting a nursing survey of the State of S. Dak. Took along **Mrs. Schmidt** of the P.T.A.

June 11

Drove to Watertown to meet with the Executive Committee, where the committee appointments were mulled over and decided upon.

June 12

Spoke to the Lion's Club at Howard, S. Dak., and noted a very favorable reaction to the message I had to give.

June 14

Spoke at 10:00 A.M. to the General Assembly of the State Pharmaceutical Association at the Cataract Hotel in Sioux Falls, and then left for Chicago, where I spoke the next day in the National Junior Chamber of Commerce special committee.

June 16

Returned to spend a few days in Sioux Falls before leaving for the American Medical Association convention.

June 20 through 25

Spent in driving to San Francisco. Attended meetings of the House of Delegates and the National Medical Executives Conference. After the A.M.A. was over, remained in California to enjoy a two-week vacation.

DR. M. M. HOFER OF FREEMAN DIES

Funeral services were held at Bethany Meononite church, Freeman, S. D., July 31st for Dr. Michael Martin Hofer, who died July

(Continued on Page 251)

South Dakota Medical Association Roster, 1950

Membership by Districts

ABERDEEN DISTRICT NO. 1

Alway, J. D. Aberdeen
 Berbos, J. N. Aberdeen
 Bloemendaal, G. J. Ipswich
 Bunker, Paul Aberdeen
 Calene, J. L. Aberdeen
 Cooley, F. H. Aberdeen
 Currie, K. P. Britton
 Drissen, E. M. Britton
 Eckrich, J. A. Aberdeen
 *Elward, L. R. Doland
 Gelber, M. R. Aberdeen
 Gorder, W. Aberdeen
 Graff, L. W. Britton
 *Jackson, E. B. Aberdeen

Jones, T. D. Aberdeen
 Keegan, Agnes Aberdeen
 King, B. F. Aberdeen
 King, H. I. Aberdeen
 King, Owen Aberdeen
 McCarthy, P. V. Aberdeen
 McIntosh, G. F. Eureka
 Martyn, W. E. Aberdeen
 Mayer, R. G. Aberdeen
 Miller, A. J. Aberdeen
 Murdy, B. C. Aberdeen
 Murdy, Carson Aberdeen
 Murdy, Robert Aberdeen
 Nelson, L. A. Faulkton

Perry, E. J. Redfield
 Pittenger, E. A. Aberdeen
 Ranney, T. P. Aberdeen
 Rodine, John Aberdeen
 Rudolph, E. A. Aberdeen
 Sanders, M. E. Redfield
 Scallin, P. R. Redfield
 Schuchardt, I. L. Aberdeen
 Steele, G. H. Aberdeen
 Voge, C. L. Aberdeen
 Waldorf, C. E. Redfield
 *Weishaar, C. H. Aberdeen
 Whiteside, J. D. Aberdeen
 Williams, M. F. Conde

WATERTOWN DISTRICT NO. 2

Argabrite, J. W. Watertown
 Armalavage, L. J. Watertown
 Bartron, G. R. Watertown
 Bartron, H. J., Sr. Watertown
 Bartron, H. J., Jr. Clark
 Brown, H. Russell Watertown
 Christensen, A. H. Clark
 *Crawford, J. H., Sr. Watertown
 Crawford, J. H., Jr. Watertown

Fedt, D. N. Watertown
 *Hammond, M. J. Watertown
 *Hickman, G. L. Bryant
 Huber, R. W. Watertown
 Jorgenson, M. C. Watertown
 Kenney, H. T. Watertown
 Kilgard, R. M. Watertown
 Larson, M. W. Watertown
 McIntyre, P. S. Bradley
 Magee, W. G. Watertown

Maxwell, R. T. Clear Lake
 Montero, A. Watertown
 Randall, O. S. Watertown
 Reul, T. W. Watertown
 Rousseau, M. C. Watertown
 *Schieb, A. P. Watertown
 Schmidt, Mary Watertown
 Stoltz, C. R. Watertown
 Walters, S. J. Watertown
 Willen, Abner Clear Lake

MADISON-BROOKINGS DISTRICT NO. 3

Austin, D. C. Brookings
 Bakalinski, M. Estelline
 Baughman, D. S. Madison
 Baughman, R. C. Madison
 Benjamin, M. B. Flandreau
 Boyd, F. E., Jr. Flandreau
 Davidson, M. Brookings
 Drobinsky, M. Estelline
 Grove, E. H. Arlington
 Gulbrandsen, G. H. Brookings

Henry, R. Brookings
 Hofer, E. A. Howard
 Hurewitz, M. Colman
 Kershner, C. M. Brookings
 Moyer, L. B. Lake Preston
 Muggly, J. A. Madison
 Patt, W. H. Brookings
 Peeke, A. P. Volga
 Plowman, E. T. Brookings

Ross, R. R. Lake Preston
 Scheller, D. L. Arlington
 Sherwood, C. E. Madison
 Tank, Myron C. Brookings
 *Torwick, E. E. Volga
 Watson, E. S. Brookings
 Westaby, J. R. Madison
 Whitson, G. E. Madison
 Wold, H. R. Madison

PIERRE DISTRICT NO. 4

Askwig, L. C. Pierre
 Collins, E. H. Gettysburg
 Cowan, J. T. Pierre
 Gutch, C. F. Nebraska
 Janis, J. B. Hoven

Martin, H. B. Harrold
 Morrissey, M. M. Pierre
 Murphy, J. C. Murdo
 Nishimura, E. T. Mildand
 *Northrup, F. A. Pierre

Riggs, T. F. Pierre
 Robbins, C. E. Pierre
 Scherman, Quentin Hoven
 Sundet, N. J. Kadoka
 Van Heuvelen, G. J. Pierre

HURON DISTRICT NO. 5

Adams, H. P. Huron
 Buchanan, R. A. Huron
 Burman, Guy DeSmet
 Carbonneau, Y. H. Huron
 *Class, F. L. Huron
 *Cogswell, M. E. Wolsey
 Dean, Roscoe Wess. Springs
 Gryte, C. F. Huron

Hagin, J. C. Miller
 Hohm, Paul Huron
 Hohm, T. A. Huron
 Jacoby, Hans Huron
 Leigh, Fred Huron
 Lenz, B. T. Huron
 Pangburn, M. W. Miller

Saxton, W. H. Huron
 Saylor, H. L., Jr. Huron
 *Saylor, H. L. Huron
 Tschetter, Joseph Huron
 Tschetter, J. S. Huron
 Tschetter, Paul Huron
 *Wood, T. J. Huron
 *Wright, O. R. Huron

MITCHELL DISTRICT NO. 6

Auld, C. V. Plankinton
 Bobb, E. C. Mitchell
 Bobb, C. S. Mitchell
 Bollinger, W. Parkston
 Brookman, B. T. Chamberlain

Delaney, R. J. Mitchell
 Delaney, W. A., Sr. Mitchell
 Delaney, W. A., Jr. Mitchell
 Dick, L. C. Spencer
 *Freyberg, F. W. Mitchell

Fritz, W. H. Mitchell
 Gillis, F. Daniel Mitchell
 Gillis, Floyd D., Jr. Mitchell
 Holland, L. W. Chamberlain
 *Keene, F. F. Wess. Springs

Lewis, H. R. ----- Mitchell
 Lloyd, J. H. ----- Mitchell
 Mabee, D. R. ----- Mitchell
 Mabee, O. J. ----- Mitchell
 Moran, C. S. ----- Mitchell

Price, Mary ----- Armour
 Price, Ronald ----- Armour
 Rieb, W. G. ----- Parkston
 Skogmo, B. R. ----- Mitchell
 *Stegeman, S. B. ----- Salem

Tobin, F. J. ----- Mitchell
 Tobin, L. W. ----- Mitchell
 Tomlinson, Wray ----- Mitchell
 Vonburg, V. R. ----- Mitchell
 Welbes, M. A. ----- Bridgewater

SIoux FALLS DISTRICT NO. 7

Aspaas, P. K. ----- Dell Rapids
 Billingsley, P. R. ----- Sioux Falls
 *Billion, T. J. ----- Sioux Falls
 Billion, T. J., Jr. ----- Sioux Falls
 Binder, C. F. ----- Sioux Falls
 Breit, D. H. ----- Sioux Falls
 Burns, E. M. ----- Sioux Falls
 Carney, Myrtle ----- California
 Chalmers, J. H. ----- Sioux Falls
 Clark, J. C. ----- Sioux Falls
 Clarke, J. Y. ----- Sioux Falls
 Cottam, G. I. W. ----- Sioux Falls
 Culbertson, R. A. ----- Sioux Falls
 Dehli, F. C. ----- Colton
 DeVall, F. C. ----- Garretson
 Dickinson, J. H. ----- Canistota
 Donahoe, J. W. ----- Sioux Falls
 Donahoe, R. R. ----- Sioux Falls
 Donahoe, S. A. ----- Sioux Falls
 Driver, D. R. ----- Sioux Falls
 Duimstra, Fred ----- Sioux Falls
 Dulaney, C. H. ----- Canton
 Eggers, M. W. ----- Sioux Falls
 Eiringer, I. D. ----- Sioux Falls
 Eneboe, E. E. ----- Alcester
 Fiske, R. R. ----- Flandreau
 *Gage, E. E. ----- Sioux Falls
 Green, C. D. ----- Parker
 Green, R. D. ----- Sioux Falls
 Greenfield, R. E. ----- Sioux Falls
 Greenough, E. E. ----- Sioux Falls
 Gregg, J. B. ----- Sioux Falls

Groebe, O. A. ----- Sioux Falls
 Grove, A. F. ----- Sioux Falls
 Grove, M. S. ----- Sioux Falls
 Grove, R. F. ----- Sioux Falls
 Hage, W. J. ----- Sioux Falls
 Harris, M. A. ----- Sioux Falls
 Hermanson, J. M. ----- Valley Springs
 Hofer, E. J. ----- Freeman
 *Hummer, H. R. ----- Sioux Falls
 Hyden, Anton ----- Sioux Falls
 Ihle, C. W., Jr. ----- Sioux Falls
 Johnson, F. E. ----- Sioux Falls
 Keller, S. A. ----- Sioux Falls
 Kemper, C. E. ----- Viborg
 Kilness, A. ----- Sioux Falls
 King, Lyndon, Jr. ----- Sioux Falls
 Kittelson, H. O. ----- Sioux Falls
 Kittelson, J. A. ----- Sioux Falls
 Kohlmeyer, F. C. ----- Sioux Falls
 Lamb, Hazel ----- Sioux Falls
 Lanam, M. O. ----- Sioux Falls
 Larson, C. S. ----- Sioux Falls
 Leraan, L. G. ----- Sioux Falls
 Lietzke, E. T. ----- Beresford
 Lindquist, P. H. ----- Canova
 Logan, R. A. ----- Aberdeen
 McDonald, C. J. ----- Sioux Falls
 McDonnell, J. L. ----- Montrose
 McGreevy, E. J. ----- Sioux Falls
 McGreevy, J. V. ----- Sioux Falls

Manning, D. H. ----- Sioux Falls
 Maresh, E. R. ----- Sioux Falls
 Myrabo, A. K. ----- Sioux Falls
 Nelson, J. A. ----- Sioux Falls
 Nilsson, F. C. ----- Sioux Falls
 Ogborn, R. J. ----- Sioux Falls
 Ophem, W. L. ----- Sioux Falls
 Pankow, L. J. ----- Sioux Falls
 Parke, L. L. ----- Canton
 Pekelis, E. ----- California
 Quinn, R. H. ----- Sioux Falls
 Rayburn, F. W. ----- Sioux Falls
 Rayl, D. F. ----- Sioux Falls
 Reagan, P. C. ----- Sioux Falls
 Reagan, R. ----- Sioux Falls
 Rich, E. L. ----- Sioux Falls
 Sercl, William ----- Sioux Falls
 Shreves, Howard ----- Sioux Falls
 Stahmann, F. S. ----- Sioux Falls
 Stevens, G. A. ----- Sioux Falls
 Unruh, B. H. ----- Sioux Falls
 Vandemark, G. E. ----- Sioux Falls
 Vandemark, R. E. ----- Sioux Falls
 Vandemark, W. E. ----- Sioux Falls
 Vanderhoof, E. S. ----- Sioux Falls
 Van Lier, P. C. ----- Sioux Falls
 Volin, H. P. ----- Lennox
 Volin, V. V. ----- Sioux Falls
 Wieseler, R. J. ----- Sioux Falls
 Wessman, N. E. ----- Sioux Falls
 Zimmerman, Goldie E. ----- Sioux Falls

YANKTON DISTRICT NO. 8

Abts, F. J. ----- Yankton
 Andre, H. C. ----- Vermillion
 Auld, M. A. ----- Yankton
 Blezek, F. M. ----- Tabor
 Eyres, T. E. ----- Vermillion
 Fairbanks, W. H. ----- Vermillion
 Ferguson, R. L. ----- Vermillion
 Flynn, Eugene ----- Pickstown
 Haas, F. W. ----- Yankton
 Hanson, H. F. ----- Vermillion
 Hieb, W. E. ----- Marion
 Hill, J. F. ----- Yankton
 *Hohf, J. A. ----- Yankton

*Hohf, S. M. ----- Yankton
 Honke, R. W. ----- Wagner
 Hubner, R. F. ----- Yankton
 Johnson, C. F. ----- Yankton
 Jordan, G. T. ----- Vermillion
 Joyce, Edward ----- Hurley
 *Kalayjian, D. S. ----- Parker
 Kalda, E. F. ----- Platte
 Kaufman, I. I. ----- Freeman
 *Keeling, C. M. ----- Springfield
 Klima, Herman ----- Yankton
 Lacey, V. I. ----- Yankton

Leonard, B. B. ----- Yankton
 McVay, C. B. ----- Yankton
 Ohlemacher, J. C. ----- Yankton
 Ranney, Brooks ----- Yankton
 Reding, A. P. ----- Marion
 Sattler, T. H. ----- Yankton
 Scales, A. B. ----- Pickstown
 Schwartz, E. R. ----- Wakonda
 Slaughter, D. H. ----- Vermillion
 Smith, A. J. ----- Yankton
 Stansbury, E. M. ----- Vermillion
 Steele, J. P. ----- Yankton
 Williams, D. B. ----- Yankton

BLACK HILLS DISTRICT NO. 9

Bailey, J. D. ----- Rapid City
 Bailey, S. G. ----- Hot Springs
 Baker, C. ----- Belle Fourche
 Berkman, D. S. ----- Rapid City
 Borgmeyer, H. J. ----- Rapid City
 Brock, E. H. ----- Rapid City
 Butler, J. M. ----- Hot Springs
 Byrne, J. R. ----- Edgemont
 Clark, B. S. ----- Spearfish
 Crane, Harold ----- California
 D'Arata, E. J. ----- New Underwood
 Davidson, H. E. ----- Lead
 Davis, J. H. ----- Belle Fourche
 Dawley, W. A. ----- Rapid City
 Erickson, J. W. ----- Rapid City
 Ewald, P. P. ----- Lead
 Fitzgibbon, T. ----- Lead
 Fleeger, R. B. ----- Lead
 Geib, Wayne ----- Rapid City
 Grau, H. J. ----- Rapid City
 Hamm, J. N. ----- Sturgis
 Hare, Helen J. ----- Rapid City
 Hare, Lyle ----- Spearfish

Heideprein, Glen ----- Deadwood
 Howe, F. S. ----- Deadwood
 Holleman, W. W. ----- Rapid City
 Jackson, A. S. ----- Lead
 *Jackson, R. J. ----- Rapid City
 Jernstrom, R. E. ----- Rapid City
 Jones, W. E. ----- Sturgis
 Kegaries, D. L. ----- Rapid City
 Kobza, V. V. ----- Rapid City
 Koran, P. H. ----- Rapid City
 Lampert, A. A. ----- Rapid City
 Lemley, R. E. ----- Rapid City
 Mattox, N. E. ----- Lead
 Merryman, M. P. ----- Rapid City
 Meyer, W. L. ----- Sanator
 Miller, G. A. ----- Hot Springs
 *Miller, G. H. ----- Spearfish
 Mills, G. W. ----- Wall
 Morse, W. E. ----- Rapid City
 Morsman, C. F. ----- Hot Springs
 McCroskey, R. C. ----- Rapid City
 Namminga, S. A. ----- Fort Meade
 Neves, C. A. ----- Hot Springs

Newby, H. D. ----- Rapid City
 Olson, W. E. ----- Ft. Meade
 Orvedahl, F. W. ----- Hot Springs
 *Owen, N. T. ----- Rapid City
 O'Toole, T. ----- Rapid City
 Pemberton, M. O. ----- Deadwood
 Petsch, K. R. ----- Hot Springs
 Radsch, F. J. ----- Rapid City
 Riner, E. J. ----- Hot Springs
 Riner, H. L. ----- Hot Springs
 Roper, C. E. ----- Hot Springs
 Rudolph, F. A. ----- Rapid City
 Sackett, R. F. ----- Arlington, Va.
 Sebring, F. U. ----- Martin
 Sherrill, S. F. ----- Belle Fourche
 Skinner, H. C. ----- Rapid City
 Smiley, J. C. ----- Deadwood
 Smith, J. S. ----- Hot Springs
 Soe, C. A. ----- Hot Springs
 Spain, M. L. ----- Rapid City
 *Stewart, J. L. ----- Spearfish
 Stewart, N. W. ----- Lead

*Threadgold, J. O. _____ Belle Fourche

*Townsend, L. J. _____ Belle Fourche

Williams, F. R. _____ Rapid City
Yackley, J. V. _____ Rapid City

Clark, C. A. _____ Winner
Mannion, J. E. _____ Gregory
Morgan, R. K. _____ Winner

**ROSEBUD
DISTRICT NO. 10**
O'Brien, J. W. _____ Winner
Quinn, R. J. _____ Burke

Rosenfeld, Frederick _____ Winner
Studenberg, J. E. _____ Winner
Wilson, R. W. _____ Burke

DeLien, H. _____ Washington
George, W. A. _____ Selby
Lowe, C. E. _____ Mobridge

**NORTHWEST
DISTRICT NO. 11**
Lowe, J. A. _____ Mobridge
Spiry, A. W. _____ Mobridge
Steiner, P. K. _____ Lemmon

Torkildson, G. C. _____ McLaughlin
Totten, F. C. _____ Lemmon
Warpinski, M. A. _____ McLaughlin

Brauer, H. H. _____ Sisseton
Dawson, L. D. _____ Milbank
Duncan, Wm. _____ Webster
Gregory, D. A. _____ Milbank
*Hawkins, A. P. _____ Waubay
Lie, Dagfinn _____ Webster

**WHETSTONE
DISTRICT NO. 12**
*Jacotel, J. A. _____ Milbank
Judge, W. T. _____ Milbank
Karlins, W. H. _____ Webster
Lovering, Joseph _____ Webster
Nolan, B. P. _____ Sisseton

Peabody, J. D., Jr. _____ Sisseton
*Peabody, P. D. _____ Sisseton
Pfister, F. F. _____ Webster
Tauber, K. S. _____ Milbank
Younker, F. T. _____ Sisseton
*Indicates Honorary Member

Roster—South Dakota Medical Association, 1950

Abts, F. J. _____ Yankton
Adams, H. P. _____ Huron
Alway, J. D. _____ Aberdeen
Andre, H. C. _____ Vermillion
Argabrite, J. W. _____ Watertown
Armalavage, L. J. _____ Watertown
Askwig, L. C. _____ Pierre
Aspaas, P. K. _____ Dell Rapids
Auld, C. V. _____ Plankinton
Auld, M. A. _____ Yankton
Austin, D. C. _____ Brookings
Bailey, J. D. _____ Rapid City
Bailey, S. G. _____ Hot Springs
Bakalinsky, M. _____ Estelline
Baker, C. _____ Belle Fourche
Bartron, G. R. _____ Watertown
Bartron, H. J. _____ Watertown
Bartron, H. J., Jr. _____ Clark
Baughman, D. S. _____ Madison
Baughman, R. C. _____ Madison
Benjamin, M. B. _____ Flandreau
Bebos, J. N. _____ Aberdeen
Berkman, D. S. _____ Rapid City
Billingsley, P. R. _____ Sioux Falls
*Billion, T. J. _____ Sioux Falls
Billion, T. J., Jr. _____ Sioux Falls
Binder, C. F. _____ Yankton
Blezek, F. M. _____ Tabor
Bloemendaal, G. J. _____ Ipswich
Bobb, E. C. _____ Mitchell
Bobb, C. S. _____ Mitchell
Bollinger, W. F. _____ Parkston
Borgmeyer, H. J. _____ Rapid City
Boyd, F. E. _____ Flandreau
Brauer, H. H. _____ Sisseton
Breit, D. H. _____ Sioux Falls
Brock, Ernest _____ Rapid City
Brookman, B. T. _____ Chamberlain
Brown, H. Russell _____ Watertown
Buchanan, R. A. _____ Huron
Bunker, P. G. _____ Aberdeen
Burman, G. E. _____ DeSmet
Burns, E. M. _____ Sioux Falls
Butler, J. M. _____ Hot Springs
Byrne, J. R. _____ Edgemont
Calene, J. L. _____ Aberdeen
Carney, Myrtle _____ California
Chalmers, J. H. _____ Sioux Falls
Charbonneau, Y. H. _____ Huron
Christensen, A. H. _____ Clark
Clark, B. S. _____ Spearfish
Clark, C. A. _____ Winner
Clark, J. C. _____ Sioux Falls
Clarke, J. Y. _____ Sioux Falls

*Class, F. L. _____ Huron
*Cogswell, M. E. _____ Wolsey
Collins, E. H. _____ Gettysburg
Cooley, F. H. _____ Aberdeen
Cottam, G. I. W. _____ Sioux Falls
Cowan, J. T. _____ Pierre
Crane, H. _____ California
*Crawford, J. H. _____ Watertown
Crawford, J. H., Jr. _____ Watertown
Currie, K. P. _____ Britton
Culbertson, R. A. _____ Sioux Falls
D'Arata, E. J. _____ New Underwood
Davidson, H. E. _____ Lead
Davidson, M. _____ Brookings
Davis, J. H. _____ Belle Fourche
Dawley, W. A. _____ Rapid City
Dawson, L. D. _____ Minnesota
Dean, Roscoe _____ Wess. Springs
Dehli, H. M. _____ Colton
Delaney, R. J. _____ Mitchell
Delaney, W. A. _____ Mitchell
Delaney, W. A., Jr. _____ Mitchell
DeLien, H. _____ Washington
DeVall, F. C. _____ Garretson
Dick, L. C. _____ Spencer
Dickinson, John _____ Canistota
Donahoe, J. W. _____ Sioux Falls
Donahoe, R. R. _____ Sioux Falls
Donahoe, S. A. _____ Sioux Falls
Drissen, E. M. _____ Britton
Driver, D. R. _____ Sioux Falls
Drobinsky, M. _____ Estelline
Duimstra, Fred _____ Sioux Falls
Dulaney, C. H. _____ Canton
Duncan, W. _____ Webster
Eckrich, J. A. _____ Aberdeen
Eggers, M. W. _____ Sioux Falls
Eirenberg, I. D. _____ Sioux Falls
*Elward, L. R. _____ Doland
Eneboe, E. M. _____ Alcester
Erickson, J. W. _____ Rapid City
Ewald, P. P. _____ Lead
Eyres, T. E. _____ Vermillion
Fairbanks, W. H. _____ Vermillion
Fedt, D. N. _____ Watertown
Ferguson, R. L. _____ Vermillion
Fiske, R. R. _____ Flandreau
Fitzgibbon, T. _____ Lead
Fleeger, R. B. _____ Lead
Flynn, E. _____ Pickstown
*Freyberg, F. W. _____ Mitchell
Fritz, W. H. _____ Mitchell
*Gage, E. E. _____ Sioux Falls
Geib, W. A. _____ Rapid City

Gelber, M. R. _____ Aberdeen
George, W. A. _____ Selby
Gillis, F. D. _____ Mitchell
Gillis, F. D., Jr. _____ Mitchell
Gorder, W. _____ Aberdeen
Graff, L. W. _____ Britton
Grau, H. J. _____ Rapid City
Green, C. D. _____ Parker
Green, R. D. _____ Sioux Falls
Greenfield, R. E. _____ Sioux Falls
Greenough, E. E. _____ Sioux Falls
Gregg, J. B. _____ Sioux Falls
Gregory, D. A. _____ Milbank
Groebner, O. A. _____ Sioux Falls
Grove, A. F. _____ Dell Rapids
Grove, E. H. _____ Arlington
Grove, M. S. _____ Sioux Falls
Grove, R. F. _____ Sioux Falls
Gryte, C. F. _____ Huron
Gulbrandsen, G. H. _____ Brookings
Gutch, C. F. _____ Nebraska
Haas, F. W. _____ Yankton
Hage, W. J. _____ Sioux Falls
Hagin, J. C. _____ Miller
Hamm, J. N. _____ Sturgis
*Hammond, M. J. _____ Watertown
Hansen, H. F. _____ Vermillion
Hare, Helen Jane _____ Rapid City
Hare, Lyle _____ Spearfish
Harris, M. A. _____ Sioux Falls
*Hawkins, A. P. _____ Waubay
Heib, W. E. _____ Marion
Heidpreim, G. _____ Deadwood
Henry, R. B. _____ Brookings
Hermanson, J. M. _____ Valley Springs
*Hickman, G. L. _____ Bryant
Hill, J. F. _____ Yankton
Hofer, E. A. _____ Howard
Hofer, E. J. _____ Freeman
*Hohf, J. A. _____ Yankton
*Hohf, S. M. _____ Yankton
Hohm, P. H. _____ Huron
Hohm, T. A. _____ Huron
Holland, L. W. _____ Chamberlain
Holleman, W. W. _____ Rapid City
Honke, R. W. _____ Wagner
Howe, F. S. _____ Deadwood
Huber, R. W. _____ Watertown
Hubner, R. F. _____ Yankton
*Hummer, H. R. _____ Sioux Falls
Hurewitz, M. _____ Colman
Hyden, Anton _____ Sioux Falls
Ihle, C. W. _____ Sioux Falls

Jackson, A. S. _____ Lead
 *Jackson, E. B. _____ Aberdeen
 *Jackson, R. J. _____ Rapid City
 Jacoby, Hans _____ Huron
 *Jacotel, S. A. _____ Milbank
 Janis, J. B. _____ Hoven
 Jernstrom, R. E. _____ Rapid City
 Johnson, C. F. _____ Yankton
 Johnson, F. E. _____ Sioux Falls
 Jones, T. D. _____ Aberdeen
 Jones, W. E. _____ Sturgis
 Jordan, G. T. _____ Vermillion
 Jorgenson, M. S. _____ Watertown
 Joyce, Edward _____ Hurley
 Judge, W. T. _____ Milbank
 *Kalayjian, D. S. _____ Parker
 Kalda, E. F. _____ Mobridge
 Karlins, W. H. _____ Webster
 Kaufman, I. I. _____ Freeman
 *Keeling, C. M. _____ Springfield
 *Keene, F. F. _____ Wess. Springs
 Keegan, A. _____ Aberdeen
 Kegaries, D. L. _____ Rapid City
 Keller, S. A. _____ Sioux Falls
 Kemper, C. E. _____ Viborg
 Kenney, H. T. _____ Watertown
 Kerschner, C. M. _____ Brookings
 Kilgard, R. M. _____ Watertown
 Kilness, A. _____ Sioux Falls
 King, B. F. _____ Aberdeen
 King, L. _____ Sioux Falls
 King, H. I. _____ Aberdeen
 King, Owen _____ Aberdeen
 Kittelson, H. O. _____ Sioux Falls
 Kittelson, J. A. _____ Sioux Falls
 Klima, H. M. _____ Yankton
 Kobza, V. V. _____ Rapid City
 Kohlmeyer, F. C. _____ Sioux Falls
 Koran, P. H. _____ Rapid City
 Lacey, V. I. _____ Yankton
 Lamb, H. H. _____ Sioux Falls
 Lampert, A. A. _____ Rapid City
 Lanam, M. O. _____ Sioux Falls
 Larsen, M. W. _____ Watertown
 Larson, C. S. _____ Sioux Falls
 Lemley, R. E. _____ Rapid City
 Leigh, F. D. _____ Huron
 Lenz, B. T. _____ Huron
 Leonard, B. B. _____ Yankton
 Leraan, L. G. _____ Sioux Falls
 Lewis, H. R. _____ Mitchell
 Lie, D. _____ Webster
 Lietzke, E. T. _____ Beresford
 Lindquist, R. H. _____ Canova
 Lloyd, J. H. _____ Mitchell
 Logan, R. A. _____ Aberdeen
 Lovering, J. _____ Webster
 Lowe, C. E. _____ Mobridge
 Lowe, J. A. _____ Mobridge
 Mabee, D. R. _____ Mitchell
 Mabee, O. J. _____ Mitchell
 Magee, W. G. _____ Watertown
 Mannion, J. E. _____ Gregory
 Maresh, E. R. _____ Sioux Falls
 Martin, H. B. _____ Harrold
 Martin, W. E. _____ Aberdeen
 Mattox, N. E. _____ Lead
 Maxwell, R. _____ Clear Lake
 Mayer, R. G. _____ Aberdeen
 McCarthy, P. V. _____ Aberdeen
 McCroskey, R. _____ Rapid City
 McDonald, C. J. _____ Sioux Falls
 McDonnell, J. L. _____ Montrose
 McGreevy, J. V. _____ Sioux Falls
 McGreevy, E. J. _____ Sioux Falls
 McIntyre, P. S. _____ Bradley
 McIntosh, G. F. _____ Eureka
 McVay, C. B. _____ Yankton
 Merryman, M. P. _____ Rapid City
 Meyer, W. L. _____ Sanator
 Miller, A. J. _____ Aberdeen

Miller, G. A. _____ Hot Springs
 *Miller, G. H. _____ Spearfish
 Mills, G. W. _____ Wall
 Montero, A. _____ Watertown
 Moran, C. S. _____ Mitchell
 Morgan, R. K. _____ Winner
 Morrissey, M. M. _____ Pierre
 Morse, W. E. _____ Rapid City
 Morsman, C. F. _____ Hot Springs
 Moyer, L. B. _____ Lake Preston
 Muggly, J. A. _____ Madison
 Murdy, C. B. _____ Aberdeen
 Murdy, R. B. C. _____ Aberdeen
 Murdy, R. C. _____ Aberdeen
 Murphy, J. C. _____ Murdo
 Myrabo, A. K. _____ Sioux Falls
 Namminga, S. A. _____ Fort Meade
 Nelson, L. A. _____ Faulkton
 Nelson, J. A. _____ Sioux Falls
 Neves, C. A. _____ Hot Springs
 Newby, H. D. _____ Rapid City
 Nilsson, F. C. _____ Sioux Falls
 Nishimura, E. T. _____ Midland
 Nolan, B. P. _____ Sisseton
 *Northrup, F. A. _____ Pierre
 O'Brien, J. W. _____ Winner
 Ogborn, R. J. _____ Sioux Falls
 Ohlemacher, J. C. _____ Yankton
 Olson, W. E. _____ Ft. Meade
 Opheim, W. L. _____ Sioux Falls
 Orvedahl, F. W. _____ Hot Springs
 O'Toole, T. F. _____ Rapid City
 *Owen, N. T. _____ Rapid City
 Pangburn, M. W. _____ Miller
 Pankow, L. J. _____ Sioux Falls
 Parke, L. L. _____ Canton
 Patt, W. H. _____ Brookings
 Peabody, P. D., Jr. _____ Webster
 *Peabody, P. D. _____ Webster
 Peeke, A. P. _____ Volga
 Pekelis, E. _____ California
 Pemberton, M. O. _____ Rapid City
 Perry, E. J. _____ Redfield
 Petsch, K. R. _____ Hot Springs
 Pfister, F. F. _____ Webster
 Pittenger, E. A. _____ Aberdeen
 Plowman, E. T. _____ Brookings
 Price, Mary _____ Armour
 Price, Arnold _____ Armour
 Quinn, R. H. _____ Sioux Falls
 Quinn, R. J. _____ Burke
 Radusch, F. J. _____ Rapid City
 Randall, O. S. _____ Watertown
 Ranney, B. _____ Yankton
 Ranney, T. P. _____ Aberdeen
 Rayburn, F. W. _____ Sioux Falls
 Rayl, D. F. _____ Sioux Falls
 Reagan, R. _____ Sioux Falls
 Reagan, P. C. _____ Sioux Falls
 Reding, A. P. _____ Marion
 Reul, T. W. _____ Watertown
 Rich, E. L. _____ Sioux Falls
 Rieb, W. G. _____ Parkston
 Riggs, T. F. _____ Pierre
 Riner, E. J. _____ Hot Springs
 Riner, H. L. _____ Hot Springs
 Rodine, J. C. _____ Aberdeen
 Roper, C. E. _____ Hot Springs
 Rosenfeld, F. _____ Winner
 Ross, R. R. _____ Canova
 Rousseau, M. C. _____ Watertown
 Rudolph, E. A. _____ Aberdeen
 Rudolph, F. A. _____ Rapid City
 Sackett, R. F. _____ Arlington, Va.
 Sanders, M. E. _____ Redfield
 Sattler, T. H. _____ Yankton
 Saxton, W. H. _____ Huron
 *Saylor, H. L. _____ Huron
 Saylor, H. L., Jr. _____ Huron
 Scales, A. B. _____ Pickstown
 Scallin, P. R. _____ Redfield

*Scheib, A. P. _____ Watertown
 Scheller, D. L. _____ Arlington
 Scherman, Q. _____ Hoven
 Schmidt, M. A. _____ Watertown
 Schuchardt, I. L. _____ Aberdeen
 Schwartz, E. R. _____ Wakonda
 Sebring, F. U. _____ Martin
 Sercl, W. F. _____ Sioux Falls
 Sherrill, S. F. _____ Belle Fourche
 Sherwood, C. E. _____ Madison
 Shreves, H. _____ Sioux Falls
 Skinner, H. G. _____ Rapid City
 Skogmo, B. R. _____ Mitchell
 Slaughter, D. _____ Vermillion
 Smiley, J. C. _____ Deadwood
 Smith, A. J. _____ Yankton
 Smith, J. S. _____ Hot Springs
 Soe, C. A. _____ Lead
 Spain, M. L. _____ Rapid City
 Spiry, A. W. _____ Mobridge
 Stahmann, F. S. _____ Sioux Falls
 Stansbury, E. M. _____ Vermillion
 Steele, J. P. _____ Yankton
 Steele, G. H. _____ Aberdeen
 *Stegeman, S. B. _____ Salem
 Steiner, Peter _____ Lemmon
 Stevens, G. A. _____ Sioux Falls
 *Stewart, J. L. _____ Spearfish
 Stewart, N. W. _____ Lead
 Stoltz, C. R. _____ Watertown
 Studenberg, J. E. _____ Winner
 Sundet, N. J. _____ Kodaka
 Tank, M. C. _____ Brookings
 Tauber, Kurt _____ Milbank
 *Threadgold, J. O. _____ Belle Fourche
 Tobin, F. J. _____ Mitchell
 Tobin, L. W. _____ Mitchell
 Tomlinson, Wray _____ Mitchell
 Torkildson, G. C. _____ McLaughlin
 *Torwick, E. E. _____ Volga
 Totten, F. E. _____ Lemmon
 *Townsend, L. J. _____ Belle Fourche
 Tschetter, Joseph _____ Huron
 Tschetter, J. S. _____ Huron
 Tschetter, P. S. _____ Huron
 Unruh, B. H. _____ Sioux Falls
 Vandemark, G. E. _____ Sioux Falls
 Vandemark, R. E. _____ Sioux Falls
 Vandemark, W. E. _____ Sioux Falls
 Vanderhoof, E. S. _____ Sioux Falls
 Van Heuvelen, G. J. _____ Pierre
 Van Lier, P. C. _____ Sioux Falls
 Vogeles, C. L. _____ Aberdeen
 Volin, H. P. _____ Lennox
 Volin, V. V. _____ Sioux Falls
 Vonburg, V. R. _____ Mitchell
 Waldorf, C. E. _____ Redfield
 Walters, S. J. _____ Watertown
 Warpinski, M. A. _____ McLaughlin
 Watson, E. S. _____ Brookings
 *Weishaar, C. H. _____ Aberdeen
 Wieseler, R. J. _____ Sioux Falls
 Welbes, M. A. _____ Bridgewater
 Wessman, N. E. _____ Sioux Falls
 Westaby, J. R. _____ Madison
 Whiteside, J. D. _____ Aberdeen
 Whitson, G. E. _____ Madison
 Willen, Abner _____ Clear Lake
 Williams, D. B. _____ Yankton
 Williams, F. R. _____ Rapid City
 Williams, M. F. _____ Conde
 Wilson, R. W. _____ Burke
 Wold, H. R. _____ Madison
 *Wood, T. J. _____ Huron
 *Wright, O. R. _____ Huron
 Yackley, J. B. _____ Rapid City
 Younker, F. T. _____ Sisseton
 Zimmerman, Goldie E. _____ Sioux Falls

(Continued from Page 246)

28th at the Sioux Valley hospital, Sioux Falls, S. D., after a short illness.

Doctor Hofer was born Sept. 12, 1879, in Freeman and practiced medicine for 27 years at Dallas before returning to Freeman in 1934. In addition, for the past 10 years he has served as Hutchinson county public health doctor. He graduated from Northwestern University Medical School in 1907.

Survivors include the widow; one son, G. Martin Hofer of Blair, Nebr., and one daughter, Mrs. R. B. Finn of Wayne, Nebr. One son, Robert, preceded him in death in 1943 having been killed in action in World War II. A daughter, Mary Ann, died in infancy. Five grandchildren, three brothers, and two sisters also survive him.

DR. L. E. JORDAN MEMORIAL STARTS AT MADISON

In memory of the late Dr. L. E. Jordan, who died June 22, 1950, of coronary heart, a memorial fund has been started by the staff physicians and hospital employees of Community hospital. J. F. Stahl is chairman of the memorial committee, and it is believed that many friends throughout the state will welcome the opportunity of contributing to the fund designed to re-equip a room at the hospital.

Dr. Jordan served as a staff member of the hospital from the time it was opened in 1920, and performed all of his major surgery at the hospital. He was active in promoting the movement which resulted in modern hospital facilities for Lake county. He was the oldest physician in point of service in the county, coming to Chester, in the south part of the community, immediately after completing his medical course and internship.

29 PHYSICIANS LICENSED IN SOUTH DAKOTA

Twenty-nine new physicians were licensed at the semi-annual meeting of the South Dakota State Board of Medical and Osteopathic Examiner in Sioux Falls July 18th and 19th.

The following 15 men were admitted to the examinations and upon successfully passing the examinations will be granted licensure in South Dakota.

Leonard Akland, M.D., Menno; Romans Auskaps, M.D., Sioux Falls; Otto Baum, M.D., Yankton; Ervin S. Boone, M.D., Stone Lake, Wis.; B. W. Green, D. O., Traverse City, Mich.; Ole Hvam, M.D., Quinn; John Edwin Johnson, M.D., Sioux Falls; Edwin B. Keller, M.D., Sioux Falls; Arthur M. Semones, Jr., M.D., Lead; Thomas E. Mead, M.D., Ipswich; Don R. Morrill, M.D., Grosse Pointe Park, Mich.; Robert S. Monk, M.D., Yankton; Alfreds Rimisa, M.D., Sioux Falls; C. L. Swanson, M.D., Pierre, and Erich Paul Voss, M.D., Yankton.

The following men were licensed upon endorsement of credentials from other states; Dean C. Cooper, M.D., Sioux Falls; Carroll J. Clark, M.D., Watertown; Calvin A. Pyle, M.D., Spearfish; S. Friefeld, M.D., Brookings; Kenneth R. Kaisch, M.D., Detroit, Mich.; Gerald A. Kuehn, M.D., Mitchell; John T. Murphy, M.D., Mitchell; Norman K. Pullman, M.D., Valley Springs; Conrad E. Rosdahl, M.D., Eureka; Edward T. Ruud, M.D., Rapid City; John J. Stransky, M.D., Watertown; Willard Van Voorhis Thompson, M.D., Vermillion; T. H. Wilcockson, M.D., Omaha; Peter Vermeulen, M.D., Escanaba, Mich.

The reelection of officers of the board also took place and the following men were re-elected: Faris F. Pfister, M.D., Webster, president; J. H. Cheney, D.O., Sioux Falls, vice-president; and C. E. Sehrwood, M.D., Madison, secretary.

AMERICAN UROLOGICAL ASSOCIATION AWARD

"The American Urological Association offers an annual award of \$1,000.00 (first prize of \$500.00, second prize \$300.00 and third prize \$200.00) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to men in training to become urologists.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Palmer House, Chicago, Illinois, May 21-24, 1951.

For full particulars write the Secretary, Dr. Charles H. de T. Shivers, Boardwalk National Arcade Building, Atlantic City, New Jersey. Essays must be in his hands before February 10, 1951."

RESEARCH AND TEACHING GRANTS MADE S. D. SCHOOL OF MEDICINE

Research and teaching grants totaling \$14,-962 have been made to the School of Medicine of the University of South Dakota. Dr. Donald Slaughter, dean of the School of Medicine, reports that the grants are for cancer teaching and cardiovascular teaching, and research in analgesics, local anesthesia, and metabolism and respirations of one-celled animals.

The U. S. Public Health Service has awarded the University a cancer teaching grant in the amount of \$5,000 for the third year now, Dean Slaughter said. The grant is used to disseminate knowledge of cancer among not only the medical students of the University, but also all physicians and surgeons in the state. The project director of the grant is Dr. R. L. Ferguson, professor of pathology.

The cardiovascular (heart and blood vessels) teaching grant of \$5,000 is also from the U. S. Public Health Service, Dean Slaughter said. This is the second year this grant has been made to the University School of Medicine. It will be used for heart information in the same manner as the cancer grant and will be under the supervision of Dr. R. S. Anderson, professor of physiology.

The Jacques Loewe Research Foundation of New York has made a research grant of \$2,500 to the pharmacology department of the School of Medicine to study the effects of analgesics (pain killers) lasting over long periods of time. This work is under the direction of Dean Slaughter.

The Physiological Chemicals Co. of New York has made a scientific research grant of \$362 to the pharmacology department to study the effects of a new procaine salt to be used for local anesthesia. This project also is under the direction of Dean Slaughter.

Another U. S. Public Health grant that has been awarded to the University School of Medicine for the third year is for \$2,100 and is for the study of the respiration and metabolism of a one-celled animal, or protozoan, known as *Paramecium Caudatum*. Dr. Keatha Krueger is in charge of this project, Dean Slaughter announced. Purpose of the research is to see if this one-celled animal, with its high rate of reproduction, has similarities in respiration and metabolism that would

make it an acceptable substitute in research work for such multiple-celled animals as mice or rats. Even the dissimilarities might prove to be valuable in research results, Dean Slaughter stated.

DR. MCGREEVY WILL DO ADVANCE WORK AT OMAHA

Dr. E. J. McGreevy, 815 North Prairie Ave., Sioux Falls, has been appointed as the third year surgical resident at Creighton university, Omaha. He will remain in Omaha for a period of one year, at the completion of which time he will receive his master's degree in surgery. Dr. McGreevy plans to resume practice here with his brother, Dr. John V. McGreevy, in July, 1951, following the advanced training.

INTERNATIONAL COLLEGE OF SURGEONS WILL MEET

The Fifteenth Annual Assembly of the United States Chapter of the International College of Surgeons will be held in Cleveland, Ohio, October 31 to November 3, with headquarters at the Cleveland Hotel.

Surgical clinics will be held in several Cleveland hospitals on Monday, October 30. All scientific sessions will be held at the Cleveland Public Auditorium 9:00 a. m. to 5:00 p. m. Tuesday through Friday. A most excellent program has been arranged at which time some of the most prominent surgeons of America, and some foreign speakers, will discuss the current contemporary surgical scene.

Through the courtesy of Smith, Kline and French Laboratories, a fine colored television program of surgical procedures, originating from the St. Vincent's Charity Hospital, Cleveland will be shown daily in the auditorium from 9:00 a. m., to 1:00 p. m. Motion pictures will also be presented each day depicting many of the recent advances in surgery and surgical technique.

Reservations may be secured by writing to the Committee on Hotels, International College of Surgeons, 511 Terminal Tower, Cleveland 13, Ohio. Preliminary programs may be obtained from the central office, 1516 Lake Shore Drive, Chicago 10.

AUXILIARY ACTIVITIES

EXECUTIVE BOARD MEETINGS OF THE WOMENS AUXILIARY TO THE SOUTH DAKOTA MEDICAL SOCIETY 1949-1950

The first meeting of the Executive Board of the Women's Auxiliary to the South Dakota Medical Society was called by the President, Mrs. William Sercl, at her home on March 30, 1950. The following members were present: Mrs. William Sercl, Mrs. C. E. Sherwood, Mrs. A. Reding and Mrs. Howard Wold. The following state chairmen were also present for the meeting: Mrs. J. Clarke, Mrs. Anton Hyden, and Mrs. V. Volin.

Mrs. Sercl reported on the printing of the Constitution of the Medical Auxiliary as requested by the Auxiliary in its 1948-1949 session. It was moved by Mrs. Volin and seconded by Mrs. Reding that the President have copies mimeographed and distributed to the District Presidents and members-at-large. This motion was carried unanimously.

Article 6 Section 2 on Elections was discussed. Its reading was, "All officers, except the recording secretary and treasurer be elected for one term only." This was amended to read, "All officers to be elected for one term." A motion for this wording was made by Mrs. Volin and seconded by Mrs. Reding, and the motion carried unanimously.

The president appointed the following on the Nominating Committee for 1950:

Mrs. J. H. Lloyd, Mitchell

Mrs. J. A. Nelson, Sioux Falls

Mrs. C. E. Sherwood, Madison

This selection was approved by the members of the Executive Board.

A motion was made by Mrs. Volin that all visiting National representatives be presented a gift, symbolical of South Dakota, when present at a convention, by the Medical Auxiliary. The motion was seconded by Mrs. Hyden and carried unanimously.

Motion for adjournment was made by Mrs. Sherwood and seconded by Mrs. Clarke, Motion carried.

Respectfully submitted,
Mrs. Howard R. Wold,
Recording Secretary

The second meeting of the Executive Board was held in Parlor "B" of the Marvin Hughitt Hotel May 21, 1950, at 4 p.m. The meeting was called to order by the President, Mrs. William Sercl. Present were: Mrs. V. V. Volin, Sioux Falls; Mrs. M. R. Gelber, Aberdeen; Mrs. C. E. Sherwood, Madison; Mrs. A. D. Reding, Marion; Mrs. E. R. Schwartz, Wakonda; Mrs. W. H. Fritz, Mitchell; Mrs. J. Tschetter, Huron; and Mrs. H. Wold, Madison.

Minutes of the first Board meeting held March 30, 1950 at the home of Mrs. Sercl were read by

Mrs. Wold. Motion was made and seconded that the minutes be approved as read. Motion carried.

Members of the Benevolent Committee were asked by the President to arrange a joint meeting with representatives of the Medical Society. Mrs. Gelber reported that \$270 was turned over to the Benevolent Society by the Auxiliary in 1949 and \$287 was turned over in 1950.

Mrs. Sercl made a recommendation to the Board that:

1. The President of the Auxiliary have a traveling fund.

2. The President-elect be entitled to traveling expenses to the Chicago meeting.

Discussion was held among the members and the general agreement was that a set sum of \$50 be allowed each officer. Motion was made by Mrs. Fritz that the President and President-elect be given a travel expense account to the National Meeting, of \$50 each, and that the officer next in line be allowed to go in case one of the regular officers could not attend. Motion was seconded by Mrs. Tschetter. Motion carried.

A check of \$25 was given to Mrs. Tschetter by Mrs. Gelber as the State Auxiliary's contribution to the hostess city. Mrs. Gelber discussed the disposal of accumulated correspondence and cancelled checks. Motion was made by Mrs. Volin that any material of corresponding secretary not helpful to the historian, be destroyed beyond a 3 year date line. Motion seconded by Mrs. Reding. Motion carried.

There being no further business to come before the Board, a motion for adjournment was made by Mrs. Gelber and seconded by Mrs. Volin. Motion carried.

Respectfully submitted,
Mrs. Howard R. Wold
Recording Secretary

The third and last meeting of the Executive Board of the Women's Auxiliary for 1949-1950 was held in the Ladies Lounge of the Marvin Hughitt Hotel immediately following the first session of the convention, May 23, 1950. Members present were:

1. Mrs. William Sercl, Sioux Falls
2. Mrs. C. E. Sherwood, Madison
3. Mrs. M. C. Gelber, Aberdeen
4. Mrs. Howard R. Wold, Madison
5. Mrs. A. P. Reding, Marion
6. Mrs. V. V. Volin, Sioux Falls

Motion was made by Mrs. Sherwood and seconded by Mrs. Reding that the treasurer be authorized to pay all bills of officers and standing committee members, relative to the convention and the year's business. Motion carried.

There being no further business to come before the Executive Board, the meeting was adjourned

in regular order.

Respectfully submitted,
Mrs. Howard R. Wold
Recording Secretary

Minutes of the 41st Annual Meeting of the Women's Auxiliary to The South Dakota Medical Society 1950

The first general session of the Women's Auxiliary to the South Dakota Medical Society, opened Monday May 22, 1950 at 9:30 a.m. in the Ladies Lounge of the Hotel Marvin Hughitt in Huron.

Mrs. Joe Tschetter of Huron gave the welcome to the group, in behalf of District #5, and introduced Mrs. William Sercl, of Sioux Falls, State President to the South Dakota Medical Auxiliary. Mrs. Sercl lead the members in the "Auxiliary Pledge" after which roll call of the officers, standing committee chairman and district presidents were read by Mrs. Howard Wold.

The minutes of the 1949 assembly meetings as well as the meetings of the Executive Board were read and approved. Motion for the acceptance of recommendations made by Mrs. Sercl in the second Executive Board session was made and seconded, and approved.

Mrs. Sercl announced the appointment of the following as accredited delegates to the A.M.A. Convention in San Francisco:

1. Mrs. William Sercl, Sioux Falls
2. Mrs. A. Reding, Marion
3. Mrs. T. J. Billion, Sioux Falls
4. Mrs. Myrabo, Sioux Falls

Reports of 8 districts were given, telling of membership, activities and officers for the past year. No report from districts 9, 10, 11, and 12.

Our convention speaker, Mrs. Paul Craig, National Chairman of Public Relations, was introduced by Mrs. William Sercl. Mrs. Craig spoke to the Auxiliary on its job in public relations in close harmony with the Medical Society. Each member was asked to keep informed and to act as public relations officer in his various organizations to bring the truth of the proposed plan to light. A large amount of literature is available to all from the Executive Secretary of the South Dakota Medical Society or from Whittaker & Baxter.

Mrs. William Sercl, President of the Women's Auxiliary, gave the following report of her year's work.

Greetings to our honored guest, Mrs. Paul C. Craig, National Public Relations Chairman, my Officers, Chairman of standing Committees and all Auxiliary members throughout the State.

It is with Pleasure that I present the following report:

Soon after I assumed office, one year ago, I found that there was much to learn regarding the various activities of the State and national Auxiliaries. I immediately appointed a Chairman of Standing Committees. These Committees together with my officers have done a most creditable job and have laid the foundation for definite progress in our Auxiliary. Plans are well launched for the

State Auxiliary to take active participation in these trying times.

I have tried to keep in touch with all Auxiliary members through the South Dakota State Journal and have had a number of publications in same. In these publications I have advised members of my instructions, program outlines, encouraged better Public Relations, given them National advice, urged members to be active and stressed the importance of being well informed in all phases regarding Socialized Medicine. I have asked Auxiliary members to write their Congressmen in regard to Socialized Medicine and Senate bills, have friends write, present to the P.T.A., A.A.U.W., and all other clubs in their vicinity the truth, have study clubs and to study bills before Congress.

During my term of office, I have written over 100 letters, sent out more than 30 cards, written numerous reports, two articles for the Bulletin and also have made a great many telephone calls.

Since it was voted at the 1949 Convention at Yankton to revise and have a reprint of the State Auxiliary Constitution, I recommended that 300 copies be printed in order that each Auxiliary member over the State receive one. This was attended to during my term of office and copies were sent to the District Presidents, with instructions to give them out to Auxiliary members.

I attended the Sixth Conference held November 3rd and 4th in Chicago, Ill., for the State Presidents and President-elect, for the National Chairmen of Standing Committees and National Officers. A report of this conference was given in the December issue of the South Dakota State Journal.

During the year I visited three Auxiliary Districts and gave talks on Socialized Medicine, Senate Bills, John T. Flynn's book, "The Road Ahead," The Doctors Wife and the Facts. I have also given talks to my own Seventh District.

As a good will jester I attended, the early part of this month, the Convention of the Nebraska State Medical Auxiliary, in Lincoln. The Nebraska Auxiliary considered this an honor and were most kind and gracious to Your President. At this Convention I was called upon to give a talk about our State Auxiliary. A special thanks to Mrs. Fred C. Ferriot, Lincoln, Nebr. President of the Women's Auxiliary to the Nebraska State Medical Association, Her Officers, and the Lancaster Medical Auxiliary, for their kind hospitality.

I called one Executive Board meeting at my home in March which was reported in the Journal.

District Auxiliaries have assisted with Health Education Day programs, co-operated in Red Cross, Infantile Paralysis, Cancer Control, Benevolent funds, Supporting Crippled Children's State Hospital Drive, nurse recruitment, hospital Auxiliaries, rural health program, twelve point program of the A.M.A., Voluntary and Pre-payment Medical and Hospital care plans, pre-school clinics and Doctor's Day Activities.

The Bulletin has had a marked increase in subscriptions. There are now 53 members taking the Bulletin.

In regard to Hygeia or "Today's Health," I am

sorry to say that we have not pushed this too much.

This year a number of resolutions opposing Socialized Medicine and Socialism in any form, have been secured from individuals and various civic organizations and they are still coming in.

With the help of the Auxiliaries to the American Medical Association, we have been able temporarily, to help stem the tide of Socialized Medicine. The threat, however, still hangs over us and there is much work to be done. Everyone should study the pamphlet, "It's Your Crusade Too." It will prove tremendously helpful to all. We must be well informed ourselves. Any literature or pamphlets you may wish can be secured from Mr. Foster's Office.

The lowest per cent of any Professional group, in the distribution of material regarding Socialized Medicine, are the Dentists. It has, therefore, been suggested that the Auxiliary take up as a major project for the coming year, the distribution of literature to the Dentists' Offices. This would include setting up an original distribution and then follow-up to replenish stocks. Such supplies can be secured from the Executive-Secretary in Sioux Falls.

The membership this last year has increased from 235 to 284. I am sorry that we did not hit the 300 mark. There is much organization work to be done as I know there are Ladies in different communities that are anxious to organize. We must be better organized for advancement comes by steady activity and a determination to keep up our interest. A membership drive should be put on and all members of Auxiliaries can help in this and make others feel that it is a privilege to be a member of the Women's Auxiliary.

From this report you can readily see that it has been a busy year but an enjoyable one. My officers, Standing Committees, District Presidents and Auxiliary members have been most co-operative. It has been a lot of work, loads of fun and a grand experience.

To each and every Auxiliary member I express my heartfelt thanks and assure you it has been a great privilege to have served you as Your President.

Mrs. C. E. Sherwood, State Historian for 1949-50, reported that 3 photostatic copies of the minutes of the first Auxiliary meeting, held in 1910, had been secured, one of which was to go to the Historical Museum in Pierre, one in our history, and one to the National office of the Women's Auxiliary. These are our proof of the Auxiliary's inauguration in 1910, and evidence to be used to substantiate our claim to be the oldest Auxiliary with continuous meetings since that date. An appeal was made to the districts to send interesting material from their localities to the historian for preservation.

Mrs. V. V. Volin of Sioux Falls reported as program chairman that she had contacted the National Program Chairman for suggested outlines to be distributed to district societies, and that these outlines were forwarded to each of the 12

districts for their choice of study material. Districts 2-3-6-10 replied and requested material. Report was filed with Mrs. Schoefer, National Program Chairman for the Chicago Conference. Report filed with Mrs. Blake on Apr. 11, 1950 showing South Dakota Medical Auxiliary record of activities.

Mrs. Howard Wold of Madison gave Public Relations Report telling of letters mailed to district presidents asking them to contact delegates to the National Convention of Jewish Women, urging these delegates to favor legislation for voluntary over compulsory health insurance. District Presidents were asked to contact local editors urging, if he was agreeable, that cartoon material be used against socialized medicine. Material was to be distributed in banks and beauty parlors stating truths of socialized medicine. Regional Convention of National Association of Insurance Women was contacted for resolutions favoring voluntary plans and against socialized medicine. Material was furnished for essay work in health classes at General Beadle State Teachers College.

Mrs. Anton Hyden, Sioux Falls, reported on subscription work for "Today's Health" and was not pleased with the response.

Mrs. J. Y. Clark, Bulletin Chairman, Sioux Falls, reported on letters written to each district president asking for subscriptions to this publication. There were 6 subscriptions in the state last year and 53 this year. Mitchell heads the list with 19. Recommendations were made that all district presidents subscribe for the Bulletin.

No other standing committee chairman reported.

Mrs. Sercl appointed the following on the auditing committee for 1950:

Mrs. C. J. McDonald, Sioux Falls

Mrs. H. R. Brown, Watertown

A letter was read from Mrs. Sue Bancroft of the Nebraska Auxiliary, telling of the Auxiliary pin, designed by Nebraska and inviting South Dakota to join with them in the use and promotion of the pin. Motion was made by Mrs. Gelber and seconded by Mrs. Volin that South Dakota accept Nebraska's offer and allow members to buy and wear the emblem, if authorized to do so by the Auxiliary. Discussion of possibility of later presenting the past-presidents with a guard and gavel was held. No action was taken.

Mrs. Craig suggested that a regular "News Letter" of Auxiliary news be sent each eligible member at regular intervals to keep them informed of current activity and soliciting suggestions. The members expressed their approval of such a plan and this was referred to next year's officers.

The Nominating Committee were asked for a report but were not prepared to make a statement until the Tuesday morning session.

Mrs. C. E. Sherwood brought greetings and an expression of appreciation from Mrs. J. D. Jennings, Hot Springs, South Dakota, for the wire sent her last year by the Auxiliary. Mrs. Jennings is the first president of the South Dakota Medical Auxiliary. Mrs. Sherwood recommended that the

Auxiliary again extend best wishes to Mrs. Jennings.

Motion was made and seconded for adjournment. Meeting adjourned.

Respectfully submitted,
Mrs. Howard R. Wold
Recording Secretary
May 22, 1950

The final session of the Women's Auxiliary to the South Dakota Medical Society opened Tuesday, May 23, 1950, at 10 A. M. in the Ladies Lounge of the Hotel Marvin Hughitt. Mrs. Sercl, the State President, introduced Dr. John Saxton of Huron, President of the South Dakota Medical Society.

Dr. Saxton commented on the lethargy of the medical men to political situations around them, and spoke of the realization of the duty to keep informed and to welcome the chance to inform others as to the truth. He recommended a book "The Road Ahead" by John Flynn as good reading and thinking material for all. He expressed the hope that the Medical Society and Auxiliary could work in unison and stem the tide toward socialism.

Mrs. C. J. McDonald of Sioux Falls, reported that the auditing committee had checked the records for the year, and found all financial statements in regular order. Mrs. C. E. Sherwood, Madison, Chairman of the nominating committee presented the following slate of officers for 1950-51.

President — Mrs. A. P. Reding, Marion
President-elect — Mrs. Howard R. Wold, Madison

1st Vice-President — Mrs. C. B. McVay, Yankton
2nd Vice-President — Mrs. C. E. Robbins, Pierre
Corresponding Sec'y-Treasurer — Mrs. V. V. Volin, Sioux Falls

Recording Secretary — Mrs. E. R. Schwartz, Wakonda

Past-President — Mrs. William Sercl, Sioux Falls
Historian by virtue of her office.

New Member of Benevolent

Committee — Mrs. W. H. Fritz, Mitchell

Motion was made by Mrs. C. E. Sherwood and seconded by Mrs. C. J. McDonald that the secretary cast a unanimous ballot in favor of the slate as presented. Motion carried.

Financial report was given by Mrs. M. R. Gelber.

Mrs. E. R. Schwartz reported on the meeting of the Benevolent Society and of the reorganization with herself as chairman and Dr. C. E. Sherwood as sec'y-treas. Authorization was given Dr. Sherwood to purchase bonds with even money in the savings account, to increase the fund to approximately \$3,500. A recommendation was made that a regular meeting of the Benevolent Society be scheduled in the convention program for 1950-51.

Motion made by Mrs. V. V. Volin and seconded by Mrs. E. R. Schwartz that the Executive Board act to pay all bills relative to closing the year's accounts.

Mrs. Joe Tschetter reported on Registrations. As of Tues. May 23, 1950 there were 61 members and 2 guests registered.

Mrs. Paul Craig, National Public Relations Chairman, spoke briefly expressing her gratitude for the

many kindnesses shown her during her visit to South Dakota and again alerted every one to the work to be done, urging the reading of "Compulsory Medical Care and the Welfare State."

Mrs. H. R. Brown, Watertown, Mrs. C. E. Sherwood, Madison, and Mrs. E. R. Schwartz, Wakonda each gave an expression of thanks to Mrs. J. Tschetter and the Huron district, to Mrs. Craig, Mrs. Sercl and this year's officers for the time and effort spent on the year's program and commended all for their success. A response was given by Mrs. Paul Tschetter of Huron in behalf of the hostess club.

Mrs. M. R. Gelber was cited by Mrs. Sercl for her wholehearted co-operation and for the splendid job of organizing the Auxiliary's records which she has accomplished. Mrs. Sercl expressed her congratulations to the new president, Mrs. A. P. Reding, and gave her best wishes to the new officers.

Mrs. A. P. Reding, Marion, the newly elected president, spoke briefly to the Auxiliary members and made an appeal for co-operation as a group and as individuals.

Minutes of the opening session were read and approved as read.

Mrs. V. V. Volin moved the meeting adjourn. Seconded by Mrs. E. R. Schwartz. Motion carried.

Respectfully submitted
Mrs. Howard R. Wold
Recording Secretary

BENEVOLENT SOCIETY PROCEEDINGS

The Benevolent Society Committee met in Parlor "A" of the Marvin Hughitt Hotel, Monday P. M. May 22, 1950 to formulate organization of the group. The following members were present:

Mrs. E. R. Schwartz, Wakonda

Mrs. A. P. Reding, Marion

Mrs. Howard R. Wold, Madison

Dr. C. E. Sherwood, Madison

Dr. J. Hagen, Miller, and Dr. Will Donohue, Sioux Falls, were absent.

Dr. Sherwood reported that no formal meeting of the committee had been held since 1941, and suggested that a chairman of the group be selected and action taken on the choice of a secretary-treasurer, which office he had always held.

Mrs. E. R. Schwartz was elected chairman of the committee to be responsible for calling a regular meeting, and to work out plans for use of the fund at such time as it is available.

Dr. Sherwood reported that the fund has now reached \$3,374.34, of which \$2,099 is in bonds and \$1,275 is in a savings account. Since there did not appear to be any use for the savings account, it was decided to purchase bonds whose maturity value would be nearly \$1,500, thus increasing the fund to approximately \$3,500, with accrued interest.

Dr. Sherwood was elected secretary-treasurer and was authorized to purchase bonds according to the above plan. It was also decided to schedule a regular meeting of the committee on the convention program of 1950-51, to transact any necessary business.

Meeting adjourned.

Respectfully submitted,
Mrs. Howard R. Wold
May 22, 1950

PRESIDENT'S MESSAGE

With the report of the Executive meetings and the Minutes of the 41st Annual Meeting held at Huron, South Dakota, I write my last message of appreciation to you through the South Dakota Journal.

Thanks to District Five for the wonderful Convention. Their hospitality and consideration of everyone was indeed appreciated. If they had had a year to prepare for the Convention, I am sure it could not have been improved upon.

The cordial reception and friendly relationships of the District meetings I have attended, together with the effective work being done by the members, the co-operation from every Officer, District Presidents and Committee Chairman has left a deep and lasting impression. Much has been learned and a great deal accomplished. I am very grateful and wish for my successor the same fine spirit and help.

It has been a pleasure and a privilege to work with the Auxiliary members of South Dakota.

Mrs. William Sercl

OFFICERS

President — Mrs. A. P. Reding, Marion
President-elect — Mrs. Howard R. Wold, Madison
First Vice President — Mrs. C. B. McVay, Yankton
Second Vice President — Mrs. C. E. Robbins, Pierre
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BENEVOLENT COMMITTEE

Mrs. A. P. Reding
Mrs. Howard Wold
Mrs. E. R. Schwartz
Mrs. W. H. Fritz, Mitchell

DELEGATES TO A.M.A. CONVENTION San Francisco

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PHARMACEUTICAL DIVISION

Charles F. Van De Walle, Editor

NEWS ITEMS

H. I. Ennis of Volga has been seriously ill in the Volga Hospital for the past few weeks, but is recovering nicely now. His daughter Mrs. Ernest Scott, Pharmacist from Mount Vernon helped in the store.

Walter Matson, of Hancock, Minn. visited with brothers Bob and Bill of Matsons Drug Store in Brookings the last week in June.

Leona Halloway, clerk at Matson Drug Store in Brookings the past two years married **Walter Wobbema** of Volga, Sunday, July, 9th.

On Sunday June 25, **Duane Tupper**, Pharmacist at the Ennis Drug Store in Volga married **Annetta VanderWaal**, who worked at Shirley Pharmacy in Brookings.

Charles Maxwell of Arlington is ill in the Volga Hospital.

Bob Jones, formerly of Kendall's in Brookings is now with Wallbaum's in Yankton.

Milton Swenson, 1950 Pharmacy graduate from Roslyn, is now employed at Kendall's Drug Store in Brookings.

Ray's Drug Store in Brookings has undergone a major remodeling. Mr. W. G. Ray has installed a beautiful all glass front, has moved and rearranged the soda fountain removing the booths and installing stools, instead. He has installed a new lighting system and rearranged the store generally. Ed Parry instructor in Pharmacy at State College is employed there for the summer.

W. G. Ray and **Dr. C. M. Kershner** of Brookings spent the first week in July on their annual Canadian fishing trip.

Willis Blackwell, Pharmacy Instructor at SDSC will work for **Julian Pearson** at Sisseton the balance of the summer.

Shirley Pharmacy at Brookings has installed a new soda fountain. **Carol Olson** of Watertown and **Dale Auchampach** of Ipswich, both 1950 graduates of State College are now employed there.

Jack Jones, 1950 Pharmacy graduate, and **Wilma Slagel** were married on June 12th. They are living in Miller where Jack is working with his brother, **Mack Jones**.

Carl Johnson, Pharmacist at Lewis Drug in Sioux Falls, and **Arlene Edwards** were married on June 18th at Lead.

JoAnn Starksen, 1950 Pharmacy graduate, and **Jim Long** of Lemmon were married on June 17th in Brookings. JoAnn is working in the Lemmon Drug for the summer.

Tom Tabor of Madison and **Ann Austin** of Newell were married on July 10th. They will reside in Madison where Tom will operate the new Madison Clinic Pharmacy.

Jim Hiertz of Brookings and **Dorothea Wud-del** of Parkston were married on June 11th. Jim is employed in a Mankota drug store.

Pharmacist **Dallas Butterbrodt** has purchased the merchandise and fixtures of the former "Brown Drug Store" in Watertown. A permit to conduct a pharmacy has been issued to the new owner who will conduct the business under the name Butterbrodt Drug.

Pharmacist **John A. Fendrich** has sold the merchandise and fixtures of his drug store in Rapid City to non-pharmacists, **Robert A. Keen** and **Patsey McNeely**. Pharmacist **Donald W. Knutson** has applied for a permit to conduct this place of business as a Registered Pharmacy under the name "Keen Drug."

Waldo A. Speirs of Milbank called at the Secretary's office in Pierre while we were out of town, but left a note that he is interested in "used fixtures" which are for sale.

Bliss C. Wilson and wife visited their son, John and family in St. Paul during the weekend of July 22nd. John is attending the University of Minnesota for twelve months after which he expects to return to Pierre and his position as statistician with the Department of Health. John is taking work for his Masters Degree in Public Health.

ALL CANDIDATES SUCCESSFUL IN BOARD OF PHARMACY EXAMINATIONS

The State Board of Pharmacy has granted forty-six new licentiate certificates to practice Pharmacy in South Dakota. All but two

of these were registered by examinations which were completed at Brookings on June 6, 7, 8, 1950. Leonard Roudebush owner of "Roudebush Drug" at Custer, South Dakota and George I. Tibbs, owner of the "Medical Center Pharmacy" at Rapid City, South Dakota were granted reciprocal certificates of licensure from Wyoming and Nebraska, respectively

Pharmacists registered, by examination, include:—Mrs. Mary Lou Boatman Schuelke, (Housewife), Columbia, S. Dak.; Thomas Boyd Harris, (Dite's Pharmacy) Hot Springs; Clifford A. Wooderick, (Petersen Drug) Rapid City; Alvin G. Determan, (Schwartz Pharmacy) Huron; Raymond A. Engler, (Carter Drug's) Belle Fourche; Albert Jolink, (Gardner's Pharmacy) Fairmont, Minn.; Lloyd D. Knutson (Haggar Drug) Sioux Falls; Roger L. Koenig, (Clinic Pharmacy) Sioux Falls; Leonard P. Martens, (Blesser Drug) Milbank; James E. Miller, (Turner Drug) Faulkton; Lueman B. Rodman, (Knutson Drug) Doland; William M. Ryan, (Saterlie Drug) Mitchell; Ernest A. Schneider, (Dunning Drug Store) Sioux Falls; Gerald E. Smith, (Jones Drug Store) Custer; Earl L. Zeal, (James Drug) Wagner; A. Eugene Anderson, (Walgreen Drug) Aberdeen; Burdette C. Anderson, (Casey Drug) Chamberlain; Norma Mae Aspen, (Daniel's Pharmacy) Aberdeen; Dale Auchampach, (Shirley Pharmacy) Brookings; Donald C. Barr, (Thomas Drug Store) Watertown; James F. Baumbach, (Tommeraason's Drug) Madison; David L. Breen, (Breen's Pharmacy) Scotland; Robert D. DeKraay, (Laxson Pharmacy) Canton; Robert M. Eickman, (Becker's Drug) Deadwood; Walter B. Fellows, (Swartz's Inc.) Mobridge; John B. Haley (Casey Drug) Chamberlain; Elial P. Harr, (Bittner Pharmacy) Aberdeen; D. James Hazledine (Nyal Pharmacy) Spearfish; Dwight W. Hustead, (Kreiser's Drug Store) Watertown; James H. Jones, (Jones Drug) Miller; Donald W. Knutson (Fendrich Drug) Rapid City; William Carl Moe, (Corner Drug) Pierre; Roger D. Molstad, (N. F. Jones Drug) Canton; George F. Nelson (Nelson Drug, Milbank; Howard E. Nepp, (Bulowski Drug Store) Marshall, Minnesota; Bernard J. Rammer, (Sward-Kemp Drugs) Springfield, Minnesota; Mrs. Velma May Roberts, (Housewife) Flandreau, S. Dak.; Carr Lynn Ross, (Ross Drug Store) Sioux Falls; Laura Elizabeth

Schoenrogge, (Bonesteel Pharmacy) Bonesteel, S. Dak.; Bertil H. Swenson, (Sward-Kemp Drug) St. James, Minnesota; Thomas P. Tabor, (Clinic Pharmacy) Madison; Duane E. Tupper, (Ennis Pharmacy) Volga; John Robert Vander Aarde, (Van De Walle Pharmacy) Sioux Falls.

FEDERAL LEGISLATION WOULD PERMIT TELEPHONING PRESCRIPTIONS AND REFILLING ON AN ORAL ORDER

At the present time it is against the law for a pharmacist to take and fill any prescription via telephone. Only a written order signed by the physician or dentist may be supplied under a prescription label. At the present time it is against the law to refill ANY prescription, no matter how simple, unless the prescriber has indicated in writing that the prescription may be refilled. The traditional physician-pharmacist-patient relationship of refilling prescriptions at the patients request has been declared in violation of Section 503 (b) of the Federal Food, Drug and Cosmetic Act.

The National Association of Retail Drug-gists has announced that after numerous and lengthy conferences with top-flight officials of the Food and Drug Administration, they have worked out the language of the Durham-Humphrey bill which, if enacted into law, will permit a pharmacist to receive an oral or telephoned prescription, it will permit the refilling of prescriptions other than for habit-forming drugs and those considered unsafe for use except under the supervision of a physician, and it will permit the refilling of dangerous or habit-forming drugs via telephone if the prescriber agrees to confirm in writing within 72 hours. In fact, it will legalize many of the common practices which physicians and pharmacists have been following for years.

The Durham-Humphrey bill has been introduced in the House of Representatives as, **H.R. 8904**, and in the Senate as, **S. 3852**. The bills are identical in text. H.R. 8904 was referred to the Committee on Interstate and Foreign Commerce, and, S. 3852 was referred to the Committee on Labor and Public Health. The next job is to get them "out-of-committee" and on the calendar for action by the House and Senate. There should be little

or no opposition from the Food and Drug Administration since they helped to formulate the bill.

Now it is up to the Physicians and Pharmacists of this state to make certain that our representatives in the United States Congress will use their influence to help get these bills out of committee and also to vote for their enactment into law. Write a note to Representative Francis Case or Harold Lovre, at once, and urge their support in the passage of H.R. 8904. Write a note to Senators Chan Gurney and Karl Mundt, at once, and urge their support in the passage of S. 3852. If every pharmacist and every physician in South Dakota will do this, we can be assured of support from our representatives in Congress.

WHAT'S NEW IN U. S. P. XIV

The appearance of each revision of the United States Pharmacopoeia arouses a great deal of interest as to what new items have been included, what changes have been made in existing standards, and finally, what products have been deleted. The U. S. P. XIV will certainly be no exception in this regard since it represents a much more extensive revision than has taken place in several decades.

The U. S. P. Convention, Inc., have announced the publication of a booklet, "What's New in U. S. P. XIV." Copies of this new booklet will be distributed to all South Dakota Drug Stores in the near future. This booklet will call attention to the new additions, their counterparts as they appear on the market and their uses and doses. The information will be valuable to pharmacists and assisting physicians to use the U. S. P. as the basis for prescriptions.

Additional copies of "What's New in U. S. P. XIV," may be purchased for the nominal charge of five cents per copy from the U. S. Pharmacopoeial Convention, Inc. 46 Park Avenue, New York 16, N. Y.

NEW NATIONAL FORMULARY IX NOW AVAILABLE

The Council of the American Pharmaceutical Association has announced publication of the Ninth Edition of the **National Formulary**, which is one of the official compendia

for drugs under the provisions of Federal and State Food, Drug, and Cosmetic Laws.

In describing the new edition in the **Practical Pharmacy Edition of the Journal of the American Pharmaceutical Association** for July, Dr. Justin L. Powers, Chairman of the A.Ph.A. Committee on **National Formulary**, points out that surveys were made of the extent of use of **National Formulary** drugs at the beginning of the revision period. In these surveys, information was furnished by practicing pharmacists who were given a list of the drugs official in **National Formulary VIII** and asked to indicate the extent of their use, based upon their experience in prescription compounding and other demand for such drugs.

Therapeutic value of the drugs in use was also determined by the Committee of Revision, prior to selecting the drugs to be included in **National Formulary IX**.

Practicing pharmacists will want to arrange immediately to obtain copies of **National Formulary IX**, as its standards become official on November 1, 1950, and label changes conforming to the standards in **National Formulary IX** are expected to be ready by that date.

It is now the requirement in most states for pharmacies to be equipped with the latest edition of the **U. S. Pharmacopoeia** and the **National Formulary**, and while due allowance will be made for the time required in procurement of the new edition, it is not too soon for pharmacists to give this matter their attention.

The State Board examination questions will likewise be based upon the new **National Formulary Standards**, after the **National Formulary IX** becomes official, so that students of pharmacy will want to become acquainted with the drugs now listed for their standardization.

The book is published by the Mack Publishing Company in Easton, Pennsylvania, and is procurable through most wholesale drug houses.

PATRONIZE
YOUR
ADVERTISERS

Neuritis

by Louis J. Karnosh, M.D., Cleveland, Ohio*

Next to the common cold, one of the most frequent minor afflictions of the human race is intermittent pain along the course of a peripheral nerve. Usually its onset is sudden, its symptoms are purely subjective and where it endures but a few minutes or a few days it rarely comes to the attention of the physician.

Only when it frightens the patient, or when it is accompanied by motor palsy or when the pain is prolonged and intolerable does neuritis become a critical problem calling for accurate diagnosis and adequate therapy.

The term "neuritis" is never based on sound scientific study. It implies an inflammation of a nerve trunk which can rarely be proven except in cases of leprosy. Nobody ever dies of simple neuritis alone. Biopsies cannot be done on nerves as they can be on muscle tissue, for obvious reasons. Therefore, our knowledge of the pathology behind the garden-variety of neuritic pain which never leads to anything more serious is very sketchy and incomplete. Whenever adequate microscopic studies are available, the lesion in the nerve tissue is usually found to be a degenerative one rather than an inflammation.

Nevertheless, both layman and physician cling to the term "neuritis" and apply it to a vast congeries of painful, subjective disturbances which can be assigned to one or more peripheral trunks and their end organs in the skin, the muscles and other deep tissues of the body.

A classification of the various forms of neuritis can be made a ponderous and complex epic, or it can be presented at the expense of over-simplification as a group of three fundamental types based upon a workable and sensible therapeutic consideration. The writer chooses the latter course.

GROUP I.—THE EXPOSURE OR RHEUMATOID SYNDROMES

This is probably a shaky classification but is no worse than the score or more which is applied to the most common neuritic pain

found in these latitudes. Some text books call it "refrigerative neuritis" because the ailment makes its appearance most frequently in the inclement seasons and in parts of the body poorly sheltered from cold.

In 1904 Gowers¹ who recognized the diffuse nature of this condition coined the all-inclusive term "fibrositis" as a designation for all kinds of acute pain and deftly regarded the whole ensemble of nerve, muscle, tendon, sheath and connective tissue involvement as non-articular rheumatism. He made it clear that his term includes neuritis, neuralgia, myositis and similar morbid conditions of obscure origin.

Since so many structures seem to be implicated, the disease appears under many aliases, depending on the degree in which part is affected. Hence, we have a "Babylonian confusion" of terms such as neuro-myositis, fibrositis, fibromyositis, acute periarthritis, bursitis and dermatomyositis. It comes to the attention of many specialists and is rather lost in a no-man's-land between the internist, neurologist, neurosurgeon, orthopedic surgeon, physical therapist and dermatologist — a situation which is not always a blessing to the patient. Until we know more about the exact etiology and pathogenesis, it is just as well to call it plain rheumatism or exposure syndrome.

The onset is usually sudden and may appear overnight. The favorite sites are the side of the head, the neck, the shoulder, the intercostal region, the small of the back and the hip. Two different types of pain are experienced, one a muscular pain and spasm and the other a dull, aching pain referred along the course of one or more peripheral nerves away from the muscles involved. The combination of myalgia and neuritis is outstanding and hence the leaning toward the term neuromyositis.

The myalgia is an acute, agonizing experience aggravated by contraction of the affected muscles and relieved by their relaxation. Frequently it increases during sleep to such a pitch as to awaken the patient. Pres-

*Presented before the Annual Meeting of the South Dakota State Medical Association, Huron, S. D. May 22, 1950.

sure applied to the sore muscles reveals so-called "myalgic spots" which are found in well-defined areas along the course of the muscle which are harder to touch than the surrounding parts and which are erroneously called "nodules."

The second type of pain in neuromyositis is neuritic, being a referred pain. This is more constant, is usually traced out on the skin on a periosteal surface where there is no muscle tissue. The skin is often hyperalgesic to light touch and pin-prick. These painful skin areas never coincide with the myalgic spots or areas of muscle cramp.

In the head the nerve most readily exposed to weather is the facial nerve as it leaves the stylo-mastoid foramen where a short segment lies just under the skin.

Probably because Bell's palsy is essentially a motor defect, we rarely call it a neuritis, but it can scarcely be regarded as anything else. The paralysis appears overnight after exposure to a cold draft. All of the facial branches are involved which emerge from the common stump mentioned above. If the lesion causing Bell's palsy penetrates deeper in the facial canal there may be considerable pain which is referred chiefly to the external auditory canal, the tragus and the parotid gland. Vesicles may be seen in the canal in which case there is herpetic inflammation of the geniculate ganglion.

The second common site for neuromyositis is the neck and in the writer's experience, this exposure syndrome occurs more frequently in women, which finding can perhaps be attributed to the lower neck line in women's garb. It usually announces itself with a stiff or wry neck which becomes painful on rotation of the head. Muscles most frequently subject to tender myalgic spots and to spasm are the sterno-mastoid and trapezius not because they alone are affected, but because they are most accessible to palpation.

The referred pain in this instance is found to be more distressing than the muscle discomfort and is apparently delineated by the various branches of the cervical plexus. Most typical neuralgic pain in the neck syndrome may overlie bony areas such as the mastoid process, the occipital portion of the skull or the acromial prominence of the shoulder. In fact, the patient may only be aware of the

nerve pain and the physician may designate the ailment as only a post-auricular or occipital neuralgia.

The third site for the exposure syndrome is the shoulder and the ailment there becomes the muchly debated entity called acute peri-arthritis or simply "the painful non-articular shoulder." The distress is a deep ache and cramp about the joint with aggravation on attempting to rotate the humerus or to abduct the arm. Myalgic spots are always elicited on deep pressure over the mid-portion of the deltoid. Because of this fairly constant feature and because after repeated attacks, areas of calification are found in the sub-deltoid tissues, one facet of this condition is termed subdeltoid bursitis.

Nerve trunks most commonly involved in the acute painful shoulder are those which have the longest and deepest passage through the muscle tissue which is involved. This applies particularly to the musculocutaneous nerve and, therefore, referred pain is localized along the skin supplied by the cutaneous branch of this nerve along the radial aspect of the forearm.

The benign forms of intercostal neuralgia are probably another example of exposure syndrome. The intercostal muscles are tender with myalgic spots and when these appear in the precordial region, the patient naturally becomes concerned about heart disease and is for that reason labelled a cardiac neurosis. Pain is referred most often to the nipple in which case women are frequently concerned about a breast cancer.

When intercostal neuralgia involves the lower dorsal levels, it is responsible for what is termed high backache and pleurodynia.

Acute low-back pain coming on with abrupt onset is aggravated by stooping, bending and by deep inspiration. The myalgic spots are, as a rule, in the border of the quadratus lumborum on both sides. Pain is referred to an area over the sacrum where again there is little muscle tissue but where the neuritis is commonly mistaken for sacro-iliac sprain, a clinical entity which at best is to be regarded with skepticism.

The simpler or non-complicated forms of acute sciatic neuritis also belong to the exposure syndrome. The nidus of this disease are the nerves, muscles, tendons and fascia about the hip joint. Outdoor laborers, workers

in refrigeration plants and farmers are particularly susceptible, thus making it more frequently a masculine affliction.

The pain usually begins deep in the hip tissues and rotation or extension of the thigh is unbearable. Pain and paresthesias usually occur in two sites. If the lateral cutaneous nerve of the thigh is involved, the patient presents himself with the condition known as meralgia paresthetica. If the sciatic trunk, itself, suffers, there is a constant or intermittent pain below the knee along the course of the superficial peroneal nerve. Any attempt to stretch or compress the sciatic nerve along its extensive course elicits extreme tenderness. Absence of pain on coughing and a low spinal fluid protein usually rules out a herniated disc or a caudal tumor.

Discussions about exact pathology of exposure neuritis are always polemic. The root of the malady according to Good² can best be explained on the basis of a disturbed circulation — a diminished blood flow in the myalgic spots, but how this comes about he does not make clear.

Stockman³ first described the myalgic nodules. These have been found by many other investigators all of whom fall back upon the vague designation of non-inflammatory rheumatic nodules. These consist of clusters of lymphoid cells around blood vessels and in the substance of muscle tissue itself, where actual fragmentation of the muscle fibers is demonstrated. The connective tissue in these conditions often show the so-called "collagen disease" which is supposed to be a common denominator in lupus erythematosus, scleroderma, periarteritis nodosa as well as in all rheumatic syndromes.

There is, however, comfort in the therapeutic phase of exposure neuromyositis. One thing is clear, a deep injection of $\frac{1}{2}$ per cent procaine into the deep tissues where muscular spasm and myalgic spots are found promptly stops both muscle soreness and referred pain. Relief is almost magical. It is also good evidence that the cause of pain is not central, i. e. in the spinal roots, cord or brain. The relief afforded extends long beyond the normal effect of procainization, and the treatment can be repeated at intervals of three or four days for several weeks. In acute hip joint a long and stout needle is necessary to reach

the deep rotating muscles attached to the head of the femur.

In more chronic forms of exposure neuritis, the problem is interlocked with that of rheumatic fever, rheumatism and rheumatoid arthritis. The tedious therapies with salicylates, analgesics, local heat, diathermy, fever therapy and the techniques of physical medicine are all indicated but perhaps some day they shall all be circumvented by the magic of compound E and ACTH.

GROUP II.—POLYNEURITIS

This constitutes the second most frequent cause of peripheral neuritic pain in everyday general practice. Since we know that it is a degenerative or biochemical process, the term polyneuritis is frowned upon by some, and it is more accurate to say "polyneuropathy" or still better "acronuropathy," however awkward it may sound.

It means a simultaneous disturbance in the terminal or distal portions of the nerves in all four extremities. No matter what the cause may be, the trouble begins with numbness and tingling in the toes and fingers and progresses proximally, usually ending two-thirds of the way up the legs and forearms. Such sensory disturbances appear long before motor weakness, which is usually restricted to the muscles of the hands and feet. Early loss of ankle jerk is the rule and ataxia of the lower limbs is frequently present as well as a disposition to foot and wrist drop.

This is a systemic disorder and can be definitely attributed to some generalized infection, intoxication or deficiency disease which assails the nerve fibers furthest removed from the brain and spinal cord. Its best demonstration occurred in 1900 when scores of beer-drinkers in the city of Manchester, England became disabled by numbness and paralysis of the hands and feet after imbibing of beer contaminated by arsenic from the apparatus in the local brewery. In this country a notable epidemic of like nature occurred about two decades ago as a result of the imbibition of the so-called "Jamaica ginger" where the offending agent was Tricresyl Phosphate.

At least 75 different etiologies have been discovered in polyneuropathy ranging all the way from diphtheria and pregnancy to carbon tetrachloride and porphyria. Time does not allow for an elaborate presentation of all

these specific causes of polyneuropathy. It is, however, important to emphasize that as a general rule these forms of "neuritis" are somehow related to liver disease, to deficiency of food intake and to a depreciation of HCl in the gastric contents.

We can only talk of the most frequently encountered forms. As a sad commentary on our social habits, today the most common cause of polyneuritis in this country is alcohol. It comes to chronic drinkers, especially the regular and consistent imbibers of beer and wine. The actual onset of active symptoms is usually in the wake of inadequate diet, of an acute infection or of a delirium tremens. Only the lower extremities are affected except in extreme cases. The soles of the feet are extremely sensitive to pin prick while at the same time appreciation of fine touch and localization are diminished up to the knees. Ankle jerks are absent and foot drop develops quickly. Wrist drop is also possible even though paresthesias in the hands rarely occur. The motor palsies are probably induced by superimposed pressure trauma on the radial nerve in the arm and on the peroneal nerve in the leg — the so-called "Saturday night paralyses."

It has long been shown that alcoholics can freely imbibe and avoid polyneuritis if they are given vitamin B concentrates and liver extract along with a high vitamin diet. This experiment offers us one key to the whole problem of treating any form of polyneuritis, no matter what the cause may be.

With diabetes on the increase, we must consider the latter metabolic or nutritional disorder as the second most frequent cause of polyneuropathy in our population today. As in alcohol the lower extremities are most frequently the site of paresthesias, numbness and ataxia in the diabetic patient. This may in part be due to vascular changes in view of such tendencies in the older diabetic.

Many clinicians are frustrated because the elderly diabetic with polyneuritis does not respond to vitamin therapy and to a balanced diabetic regimen. The answer to the problem becomes clear when sections of the sciatic nerve are studied. The blood vessels nourishing the nerve trunk are found to be frequently the site of endarteritis and in many cases — even in those with early diabetes — the pain is definitely due to ischemia of the

nerve trunk. Hence, vasodilators, such as nicotinic acid or surgical sympathectomy, may do better than vitamins or increased insulin and carbohydrate fraction in the diet.

The third most frequent metabolic disorder which produces a distal degeneration of nerve fibers is pernicious anemia. On the clinical side it is unique in that numbness and paresthesias appear in the hands sooner than in the lower extremities, something which other neuropathies rarely show. This polyneuropathy very quickly ascends up into the spinal cord to produce the familiar combined toxic cord disease, imposing spasticity, bladder symptoms and ataxia. Urgent and early treatment is indicated, for it is well established that the peripheral polyneuropathy of pernicious anemia is reversible whereas the cord complications are not. While we are still struggling to find the specific fraction in liver extract which nullifies nerve degeneration in pernicious anemia, so far nothing holds much promise except possibly B₁₂ and several authorities on the subject regard the latter as no more useful than crude liver.

Peripheral neuropathies due to heavy metal poisoning are probably on the wane where once they were a most frequent cause. Largely because arsenic and mercury compounds are giving way to antibiotics in the treatment of syphilis and because their dosage is more carefully regulated we see fewer cases of arsenical paralysis and scarcely none at all of mercury. Lead intoxication is also becoming a rarity because of the many precautions established in industry against the possibility of absorption of this metal.

When in 1945, English investigators introduced the dithiol called 2, 3-dimercapto-propanol, now known as the famous BAL (British Anti-Lewisite), it was quickly found to be an effective treatment of intoxications with arsenic, mercury, antimony and cadmium. Lead poisoning, however, did not yield to its action.

This effect on metallic poisoning by BAL gave rise to a new theory as to the cause of all peripheral neuropathies. These are now regarded as being the result of some disruption of the enzyme systems that regulate the metabolism of the neurone. The sulphur radical plays an important part and the effect is not a true degeneration but a reversible

process somewhat like procaine action in local anesthesia. BAL is said to restore the enzymatic equilibrium and to allow a rapid recovery providing the nerve fiber itself has not been seriously injured.

After BAL was found to be effective in heavy metal neuropathies, Furmansk⁴ applied it to the treatment of metabolic and infectious types of peripheral nerve disease with rather startling and most encouraging results after vitamins and crude liver proved to be of no avail.

The BAL (10% solution of British Anti-Lewisite in 20% benzyl Benzoate and peanut oil) is given in doses of 1.5 to 3 mg. per kilogram body weight once a day by intramuscular route for a period of 10 to 20 days. Side actions from this drug are a feeling of heat in the part where the injection is made while general symptoms include tetany, excessive perspiration, lacrimation, salivation, nausea, vomiting and severe malaise, such occurring in cases of idiosyncrasy or where excessive doses are given.

GROUP III.—PSEUDO-NEURITIS OR PSYCHALGIA

This third general grouping of patients who present peripheral nerve pain constitutes an unhappy chapter in our clinical experience, for their numbers are legion, and they furnish the most frequent diagnostic pitfalls; they are the greatest sources of humiliation and therapeutic frustration; they afford the greatest number of useless and futile, surgical and medical procedures.

The middle-aged woman in the involutional period plays the most frequent role in this syndrome of pseudo-neuritis. The favorite sites of pain are in the face or about the genital regions.

The most distinguishing feature of the problem is usually overlooked, because it is only vaguely sensed rather than objectively noted. It is not the nature or distribution of the pain but the emotional tone behind its telling. One neurologist expressed it as follows: "The patient with psychalgia has more to tell the doctor than the doctor tells the patient." The rush and pressure to recite the sufferings, usually qualified as being "terrible" is quite characteristic. Behind the story is an undertone of desperation, anxiety and tension which the patient with true neuritic pain rarely displays.

Site of pain in the face is usually bilateral and near the midline, deep within the nose, the sinuses, the palate, the pharynx or mouth. The discomfort is usually constant, a "terrible burning," a pressure or "creeping feeling" which is never typical of tic douloureux even though it is often erroneously called an "atypical" trigeminal neuralgia.

Injection with alcohol of the trigeminal branches on one side of this bilateral facial pain often produces no relief, indicating at once that it is central or psychic pain. On the other hand the patient may state that relief is obtained by alcoholic injection, but not for long and in a few days there is further demand for treatment, and in fact the affliction is often made "worse" by the aggravating numbness produced by the nerve block.

This at once is a psychiatric problem, for it is evident that the perpetuation of the pain has a positive, though concealed value to the patient. Not only the pain itself but the persistent demand that something be done about it all the time is prime evidence that there is an unconscious necessity for an illness and for an illness which must have constant and dramatic attention.

In most of these psychalgias the unconscious factors which dictate the pain are quickly detected in psychiatric interviews. They represent an indirect or concealed way by which the patient evades a distressing personal problem or expresses hostility toward and retaliation upon relatives and friends. A common genesis in the middle-aged woman is the disintegration of her family life, when her matriarchal drives are frustrated by the marriage of her children, leaving her alone with a husband who offers her no incentives and who becomes the butt of her psychalgic agitation.

Treatment is complex, the most difficult part being to educate the family and to spare the patient from needless surgical and dental mutilation. A psychiatric study is of paramount importance and the underlying psychogenic factors should be thoroughly explored and explained. If agitation persists and the patient is incapable of compromising with the life situation, then shock therapy is in order and is far more rational than cutting or blocking of peripheral nerves. If any neurosurgical procedure is indicated at all, it

(Continued on Page 272)



PRESIDENT'S PAGE

SEPTEMBER MESSAGE

Summer is about over, and by now we know if South Dakota has made a good crop. Whether we realize it or not, we are as dependent on crops as are those who actually till the soil. In like manner, we are — or should be — politicians.

Our profession has not fared too well under the various "DEALS" new, square or d—ned rotten. Were it not for staunch "anti-dealers" still in office in Washington, we should be in much worse situation and in graver danger of losing our medical liberties. An election is coming up soon, and it is up to us to get out and VOTE. Nor is that enough; we must get others to vote to keep these men in office and to elect men who have demonstrated their sympathies to the American Way of Life. Party lines may not be as important in State as in National Elections, but State Officers have the pressure power to spread propaganda against what we know to be for the public welfare. Whatever our personal convictions may be, we owe it to ourselves and to our neighbors, to express ourselves at the polls. So VOTE and get out THE vote.

Above all, we need a united front within our own ranks. The Dictators have long followed the idea of "divide and conquer." Let us not become divided in politics nor in personalities. We have seen the effects of bickering between doctors in communities. Political ammunition is made of such affairs. Let us rather work toward a supporting attitude, helping our brothers rather than weakening ourselves by spreading derogatory remarks and comments about them. To make mistakes is human, and it might be we that make the next one.

Now, unless you have already done so for this year, reach down and drag out that check book, and mail John Foster a check for one dollar for each year you have been in practice, for the ENDOWMENT FUND for the MEDICAL SCHOOL. It is OUR medical school. Let's, by our donations to the Fund, make it in fact "second to none" in its class. Get the dollar per year habit every year.

L. J. Pankow, M.D.

EDITORIAL PAGE

WILL THEY VOTE AS DOCTORS OR AS DEMOCRATS?*

"The administration in Washington is sick with intellectual dishonesty, with avarice, with moral laxity, and with reckless excesses."

No, it was not a Republican politician seeking votes in the coming election who made this heated charge. It was not made by a zealous chairman of some Republican state or county central committee, seeking to discredit the opposition party.

It was the challenging declaration of Dr. Elmer L. Henderson of Louisville, Kentucky, newly elected president of the American Medical Association, in his inaugural address before the national convention of that organization in San Francisco last Thursday.

To continue with quotation from Dr. Henderson's address: "Little men with a lust for power, in the executive branch of the government, are seeking to make America a socialist state in the pathetic pattern of the socially and economically-bankrupt nations of Eprope." And then: "That condition must be changed, if we are to survive as a strong, free people," and he called upon all of the American people to share the responsibility and to uphold the nation's ideals of service.

Then, directing himself to every doctor in the United States to "dedicate himself, not only to the protection of the people's physical health, but also to the protection of our American way of life, which is the foundation of our economic health and our political freedom," the A.M.A. president, averred:

"American medicine has become the blazing focal point in a fundamental struggle which may determine whether America remains free, or whether we are to become a socialistic state, under the yoke of a government bureaucracy dominated by selfish, cynical men who believe the American people are no longer competent to care for themselves."

Striking directly at the Washington administration's effort to inaugurate a system of

socialized medicine in the United States, Dr. Henderson charged:

"These men of little faith in the American people propose to place all our people, doctors and patients alike, under a shabby, government-dictated medical system which they call compulsory health insurance. But it is not just socialized medicine they seek. Their real objective is to gain control over all fields of people of self-determination and self-government."

All right, Dr. Henderson, this and much more that you and other doctors have been saying is true. Maybe you, and they, would have said it if a New Deal, Fair Deal Washington administration hadn't included compulsory health insurance, alias socialized medicine, in their over-all program. We say "maybe," but we very much doubt it. **Most doctors (not all) do not take as much interest in government and politics as they should.** Too often they do not want to dirty their white hands with so smelly an operation as is involved in the removal of stinking political tumors. Possibly there would not be the intense, and justified, interest in the current rush of government into socialism, were it not for the fact that the New Deal, Fair Deal program is about to engulf their own highly honorable profession.

Be that as it may, the doctors of America are now faced with a critical situation, one which calls for as intense, as studied, as co-operative an effort as would be demanded if the country were in the midst of some physical pestilence. That the nation's physicians recognize this to be a fact, as related to their own profession, can not be doubted. Dr. Henderson was speaking the mind of tens of thousands of other physicians. His challenge was to these other physicians. There is only one avenue through which this challenge can be effectively and unequivocally answered: **THE BALLOT BOX.**

The Gazette does not know Dr. Henderson's political affiliation; but if he believes what he told the other doctors at the San Francisco convention, and if the physicians to whom he

* Reprint of the Mitchell Gazette of June 6, 1950.

made his appeal are sincere in their desire to rid the nation of the "little men with lust for power," they will remember on November 7, that there is only one way to forestall compulsory health insurance, only one way to head off socialized medicine, only one way to check the on-rush of socialism; and that is to help defeat every administration Democrat who seeks election or re-election to Congress, and every Democrat gubernatorial or legislative candidate who is seeking to put himself into a position through which he can help promote the New Deal, Fair Deal, Socialism program in the United States.

Doctor! There are 199,745 of you (M.D.s) in the United States. There are 75,645 dentists. There are approximately 6,000 osteopaths and 11,000 chiropractors. And let it be said that here is ground for common battle. This represents a total of 282,390 voters. Maybe half of these are registered as Democrats and half as Republicans. That's just a guess. But there is no guessing as to how the 141,195 Republicans will vote. The remaining question is: Will you 141,195 doctors who are registered as Democrats vote as doctors or as Democrats when you go to the polls on November 7?

That will be the test of the results of President Henderson's appeal.

BREAKING GROUND CEREMONY FOR NEW MEDICAL SCIENCE BUILDING VERMILLION — AUGUST 4, 1950*

When I was presented with my Medical Diploma in 1921 I was interested in what was printed on it. I read it pretty carefully, and one phrase sounded interesting to me. The diploma stated that I had done the required work in a satisfactory manner, and that I was granted the Degree of Doctor of Medicine, Quote: with all the rights, honors and privileges, together with the responsibilities and obligations thereunto appertaining, unquote. In addition to being a nice big mouthful of words, I believe that it is true that the more rights, honors and privileges one has, the greater become his responsibilities and obligations. By virtue of rights, honors and privileges, I stand here today, taking part in these ceremonies of breaking earth to start the construction of a new building to house our Medical School. I am here, not be per-

*Presentation by L. J. Pankow, M.D., President of S.D.S.M.A.

sonal right, honor or privilege, but because I am a Doctor of Medicine, a Member and an Officer of the South Dakota State Medical Association, and its spokesman on this wonderful occasion. More than that, when some years ago, our Medical Association formed a committee to bring in a report about the Medical School, I was named on that Committee. As the years have gone on that committee has continued to function, not only as a fact finding body, but as an advisory committee to the administration of the Medical School. It was that committee that went to Pierre and had some part in obtaining favorable action on the appropriation that provided the money to construct this new building. Then, when our State Medical Association sanctioned it, I was one of the incorporators and directors of a Corporation to receive money to form an endowment for medical education in South Dakota. This Corporation now exists and is functioning. These then are the rights, honors and privileges by which I am here. But my diploma charged me with responsibilities and obligations as well as granting me favors. Mindful of these obligations and responsibilities I pledge, as spokesman for the Advisory Committee to the Medical School; — I pledge, as spokesman for the Medical School Endowment Fund Corporation; — I pledge, as President of the South Dakota State Medical Association, that our interest and effort shall not end here, with the construction of a new home for the teaching of the Medical Sciences. I pledge our continued support, — Moral, Physical, Financial and Spiritual, and this, our South Dakota Medical School shall become in its classification, second to none in these United States of America.

CANDIDATES EXPRESS VIEWS ON SOCIALIZED MEDICINE

Although we are fortunate to have candidates who give at least lip service to opposition to socialized medicine, the editors of the JOURNAL continue to request views of the various candidates on the problem. Now that the primaries have separated the cheap from the gloats, the candidates for public office in the November elections have been polled for statements. Following are some of the replies:

JOHN A. ENGEL, Democratic candidate for Senator . . . "I am unalterably and un-

deniably opposed to socialized medicine and do not favor compulsory health insurance as embodied in the Ewing report.

I do feel that we should have some type of medical care for those who do not budget for it and I am inclined to favor a plan of voluntary health insurance similar to the plan proposed by Senator Paul Douglas of Illinois during the last session of Congress."

FRANCIS CASE, Republican candidate for Senator "I am not in favor of socialized medicine as that term is commonly understood I support various research and clinical programs in the field of preventive medicine. **I do not favor and will continue to oppose efforts to institute a medical program which destroys individual choice and puts medical services on a timeclock basis."**

SAM H. BOBER, Democratic candidate for Representative "I am not in favor of socialized medicine. **I am in favor of legislation to provide medical care for those who have no ability to pay for it."**

E. Y. BERRY, Republican candidate for Representative "I do not favor compulsory health insurance nor legislation to provide medical care for those who do not budget for it. **Nor do I believe in the government planning the lives of individuals in any other program whether it be in medicine or anything else.**

SIGURD ANDERSON, Republican candidate for Governor "I am opposed to socialized medicine."

JOE ROBBIE, Democratic candidate for Governor **Did not answer the letters requesting his opinion.**

GULLIBLE'S TRAVELS

August 4. Drove to Vermillion with **Dr. L. J. Pankow** to participate in the ground breaking ceremonies at the new medical school building. **Dr. I. D. Weeks**, University President, handled the shovel, being ably assisted by **Dr. Don Slaughter**, Dean of the Medical School. **Dr. Pankow** made a short speech.

August 16. Drove to Scotland where I had a cup of coffee with **Dr. Maxwell Liebert** who is just getting nicely established in the community. Made another stop at Tyndall to see **Dr. D. R. Brown**, who is a new member of the Association.

The next stop occurred at Burke where I had a lengthy discussion with **Mr. Lillibridge**,

a former state representative. Stopped briefly in Winner and then drove across some of the dustiest roads in the State to Martin where I had a pleasant visit with **Dr. Westaby**, another new member of the Association.

Arrived in Rapid City in time to enjoy an excellent steak at the Esquire Club in the august presence of **Dr. George Stevens**, of Sioux Falls.

August 17. Drove to Deadwood in the morning to discuss a get-out the vote campaign with the president of the State Restaurant Association, **Charles Sederstrom** and then headed for Spearfish and some of **Dr. Hare's** fried in the open trout. Enjoyed the presentation of fifty year pins by **President L. J. Pankow** to young-looking old-timers, **L. J. Townsend** of Belle Fourche and **G. H. Miller** of Spearfish. **Dr. Pankow** made a short speech.

CUFF NOTES

Twenty-Five Ways of Getting Into Trouble in the Care of Fractures. Cont'd

During Treatment:

11. Delay in fixation — should be accomplished while definite treatment is being arranged.
12. Delay in reduction.
13. Inadequate reduction.
14. Undue roughness during reduction.
15. Unfavorable consequences of repeated attempts at reduction.

Pre-anesthetic Medication for Children

West and Papper found scopolamine to be superior to atropine in its effect on secretions in children. Scopolamine frequently affords psychic sedation in children whereas atropine does not. Optimal effects of either drug are noted in injected 31 to 60 minutes prior to induction of anesthesia. Larger doses of belladonna drugs that are usually recommended for children are safe. James S. West and E. M. Papper. *Anesthesiology*, May 1950. **CHRONIC STENOSING TENOVAGINITIS OF THE WRIST**

De Quervain, in 1895, described a condition affecting the tendon sheaths of the tendons of the abductor longus pollicis and the extensor brevis pollicis muscles at the groove on the outer border of the lower end of the radius. The tendons of the extensor muscle of the thumb are liable to become strained and the sheath inflamed after excessive exercise, producing a sausage-shaped swelling along the

course of the tendon and giving rise to a crackling sensation in the finger.

The condition can be traced to chronic occupational trauma in work requiring continued strain in the use of the hand and in the maintenance of prolonged flexion of the thumbs and fingers. Women are more often affected than men, the proportion being 5 to 1 or higher.

The symptoms and pain of gradual onset in the wrist, localized over the radial styloid, may radiate either into the thumb or into the forearm. Lifting objects large or small, or grasping, increases pain, and functional weakness is common. A definite thickening over the annular ligament of the wrist and the tendon sheath is noted, with local tenderness on pressure. Loss of free extension and abduction of the thumb is common. Examination of the affected hand in most cases reveals a definite nodular tender thickening over the radial styloid; extension and abduction are limited, and there is a distinct tendency to avoid use of the thumb together with a weakness in the grip of the hand.

Treatment: Conservative measures may be used in early stages, the primary indications being protection of the wrist and hand if the causative factor is occupational stress. In most cases surgical intervention is advised at once.

The procedure is simple and is done with novacaine anesthesia. The cutaneous area over the thickened nodule is infiltrated, care being taken in making the small incision to avoid injury to the small sensory branch of the radial nerve. The incision should be transverse over the radial styloid, as the longitudinal incision may result in a painful or keloid scar. The tendon sheath is split longitudinally, and a small probe is passed above and below the constricted area. The patient then actively moves the two tendons through the full range of motion to be certain that release of the constriction is adequate.

Curitis Halls and Carl Berg. **The Journal of the International College of Surgeons.** July, 1950.

Edited by Don H. Manning, M.D.
Sioux Falls, S. D.

REORGANIZATION PLAN NO. 27

The defeat of Reorganization Plan No. 27 by the House of Representatives is now past

history. However, it is important to all members of the medical profession in South Dakota to note the action taken by our legislators on this particular Bill. Reorganization Plan No. 27, as you know, was a rehash of Reorganization Plan No. 1 which would have made the current chief of the Federal Security Administration a member of the President's Cabinet in charge of health and welfare. The dangers of such a reorganization have been publicized before. Now is the time to commend one of our legislators who was active in the fight against Reorganization Plan No. 27. **Harold Lovre, Congressman from the 1st District, has consistently voted against bills which would tend to socialize the practice of medicine in the United States. Again, on Reorganization No. 27, he recorded his vote in favor of the resolution which defeated the plan.**

We are sure that many of Mr. Lovre's friends in the medical profession would be happy to take a few minutes time to send off a letter to him commending him on his action.

Representative Case, who will be the Republican nominee for the Senate this year, didn't cast a vote but has assured us that he would have voted against Reorganization Plan No. 27 had he been available at the Capitol at the time of the vote. As it happened, Mr. Case was called to Tuscon, Arizona by the severe illness of his brother. In the past, Representative Case has been quite vehement in his opposition to any plans to socialize the practice of medicine.

(Continued from Page 267)

should be that which modifies the mechanisms of agitation and obsession, and this usually means the relatively desperate maneuvers such as lobotomy, topectomy, or transorbital leucotomy.

Perhaps this conclusion may be an oversimplification. There are three major types of everyday neuritic pain. One—the exposure of rheumatoid group; two—the peripheral neuropathies of hands and feet; third—the group of complicated souls.

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This is



SEPTEMBER
1950
Vol. 3 No. 9

YOUR MEDICAL ASSOCIATION

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

NEWS NOTES

The 7th Annual Meeting of the AMERICAN MEDICAL WRITERS' ASSOCIATION, to be held at Springfield, Ill., Wed., Sept. 27, 1950, during the 15th annual meeting of the Mississippi Valley Medical Society (Sept. 27, 28, 29) in that city.

* * *

The State Board of Medical and Osteopathic Examiners has transferred its office to Madison but meetings will continue to be held in the Association offices in Sioux Falls.

* * *

The Medical Association has taken leadership in a "get-out-the-vote campaign for the coming November elections. The Association, along with the Pharmacists, Retail Liquor Dealers, and the Greater South Dakota Association, is sponsoring distribution of paper napkins urging people to vote. Distribution will be handled by the Restaurant Association.

* * *

Contributions to the Medical School Endowment Association are coming in slowly but several have picked up the idea of putting in \$1.00 for each year of practice.

* * *

The health survey being

prepared by the Rural Health Committee is well on the way to completion. A meeting to study the results is in the offing.

* * *

The Council and the President of the Association have appointed a Procurement and Assignment Committee to cooperate with Armed Forces officials in selection of physicians for the services.

* * *

A. A. Lampert, M.D., Rapid City, is the new Councilor from the Black Hills replacing R. E. Jernstrom, M.D., who was elected vice-president of the Association at the May meeting.

FELLOWSHIP FOR RESEARCH OFFERED

The Arthritis and Rheumatism Foundation is offering fellowships for research in the basic sciences related to the study of arthritis. These fellowships carry a stipend of from \$4,000 to \$6,000, depending upon the needs and ability of the worker, and run for a period of one year. The fellowships would begin in July 1951, although earlier appointments would be considered by the committee.

The Foundation is anxious to back a candidate, rather than a project, an institution,

or a hospital. It hopes to arouse interest in arthritis in a wider circle of medical investigators and to encourage able, inquiring minds.

Applications should be sent to the Arthritis and Rheumatism Foundation, 535 Fifth Avenue, New York 17, New York by January 1, 1951. Notification of the fellowships granted will be made March 1, 1951.

If any applications are received by September 15, 1950, they will be acted on at that time and notification made immediately.

AMERICAN HEART ASSOCIATION ACCEPTS APPLICATIONS FOR RESEARCH FELLOWSHIP

New York — Dr. Howard B. Sprague, President of the American Heart Association, announced today that new applications for Research Fellowships and Established Investigators will be accepted up to September 15, 1950. Applications for Research Grants-in-Aid, including grants to basic sciences, may be filed up to December 15, 1950.

Information and application forms may be obtained

from Dr. Charles A. R. Connor, Medical Director, American Heart Association, 1775 Broadway, New York 19, N. Y.

Dr. Sprague pointed out that ten per cent of the Association's research funds, or approximately \$45,000, will be available during the academic year 1951-52 to support research investigations in basic sciences, even though such investigations are not directly related to the field of cardiovascular diseases.

Fellowships for Established Investigators may be granted for a five-year period at a minimum stipend of \$5,000, with an annual increase of \$500. They are open to superior individuals of proven originality, with the degrees of Doctor of Medicine, Doctor of Philosophy, or Doctor of Science, or equivalent degree, who are interested in making a career in research.

Research Fellowships are granted for a one-year period, with a stipend ranging from \$3,000 to \$4,300. They are open to graduates of approved medical or graduate schools who are interested in research and intend to follow an academic career.

Grants-in-aid are available to non-profit institutions possessing the requisite basic facilities for research and having the necessary experienced investigators on their staffs. They are designated for a specified program of research.

It is estimated that more than \$1,000,000, or over 25% of the \$4,000,000 raised nationally during the 1950 Heart Campaign, will have been allotted this year to research support of all kinds

by the American Heart Association and its affiliates. Of this total, approximately \$450,000 represents funds of the national Association, with the additional \$550,000 allocated by its local affiliates.

**PENICILLIN DOSAGE
RECOMMENDED BEFORE
DENTAL EXTRACTIONS
AND REMOVAL OF
TONSILS AND ADENOIDS
IN RHEUMATIC INDIVIDUALS
AND PATIENTS
WITH CONGENITAL
HEART DISEASE**

New York — A statement approved by the American Council on Rheumatic Fever of the American Heart Association recommends specific dosage for the administration of penicillin before dental extractions and removal of tonsils and adenoids in rheumatic individuals or patients with congenital heart or blood vessel defects to prevent the possible development of subacute bacterial endocarditis. The text of the statement follows:

"Following dental extractions and removal of tonsils and adenoids, bacteria are frequently present in the blood streams for short periods of time. In rheumatic individuals or in patients with congenital heart disease these bacteria may lodge in the heart valves and cause bacterial endocarditis. Although a variety of bacteria cause this disease, the majority of cases are due to alpha streptococci, (streptococcus viridans). Alpha streptococci are usually resistant to sulfa drugs. Penicillin is, therefore, recommended for prophylaxis.

"1. Except in emergencies

operative procedures in rheumatic individuals should be deferred until there is no clinical evidence of rheumatic activity and laboratory tests indicate that the rheumatic process is subsiding.

"2. Patients should be free from upper respiratory infection.

"3. Minimum dosage of penicillin:

(a) 300,000 units of aqueous penicillin intramuscularly 30-60 minutes before extraction or operation.

(b) 300,000 units of procaine penicillin in oil injected intramuscularly at the same time in a different site.

"Penicillin prophylaxis is not necessary for the extraction of deciduous incisors or bicusps unless infection of the gum is present. It should be used for the extractions of deciduous molars, all permanent teeth and for tonsillectomy and adenoidectomy. In most instances it is best to extract one tooth at a time; multiple extractions should be avoided. In cases of extensive gum infection or severe root infections (apical abscesses) it is advisable to give several doses of penicillin starting the day before operation and continuing one or two days thereafter.

"Women with rheumatic or congenital heart disease should receive penicillin prophylaxis at the time of delivery. It is also recommended for patients requiring gastrointestinal surgery."

B.C.G. VACCINATION

Considerable attention has recently been given to BCG vaccination in the public press. From this publicity

the impression might be gained that this procedure alone holds promise of real control of tuberculosis. Since such an impression might postpone indefinitely the establishment and extension of accepted control measures, this statement of the status of vaccination in tuberculosis control program is issued.

- 1) Control measures in tuberculosis should be directed at eradication of the disease as a major cause of death or disability.
- 2) The marked improvement in tuberculosis mortality figures, particularly for the ages under 30, demonstrates the effectiveness of the present control program.
- 3) The low rate in children and the continuing high rates in adults over 50 emphasize the location of the problem at the older age levels rather than in children. Under these circumstances, the efficiency of a method of tuberculosis control would be measured by its effect on the mortality from tuberculosis in the older age group, rather than in children.
- 4) The addition of a vaccine

to the present control program requires both careful and adequate consideration. Of the vaccines proposed, BCG has been used most widely and is the one most often discussed.

- 5) This has been used for more than 25 years and recently many millions of people have been vaccinated. However, it must be stated that there is no evidence that meets strict scientific requirements demonstrating that BCG affects the control of tuberculosis, despite the very suggestive results of a few studies.
- 6) Because of the above fact and because there is no general agreement among investigators anywhere in the world on such fundamental matters as the preparation of vaccine, the method of vaccination, what constitutes a successful vaccination, how resulting immunity may be measured, how long such immunity lasts, etc., the procedure would seem to be still in the investigational period.
- 7) It is therefore recommended that investigation of vaccination in tuberculosis

be continued and increased under standard and stringently controlled conditions. This investigation should be designed to determine if the vaccine is indeed effective and what the limitations of its use might be. It would seem desirable that in each country, one agency preferably the official health agency, should have control of the investigation.

- 8) Until this has been determined and until these controlled studies completed, the use of BCG vaccine should be limited to such investigative studies.
- 9) At the present time the methods which have been proved effective in tuberculosis control should be increasingly applied to all segments of the population, regardless of decreasing mortality figures, so long as tuberculosis remains an important cause of death. These measures include mass x-ray case finding, early diagnosis, rapid institution of treatment, isolation of open cases, and the restoration of the patient to normal life.

Financial and Enrollment Experiences
South Dakota Injury-Illness Expense Plan
From Inception February 12, 1947 to June 30, 1950, Inclusive

Financial Experience

<u>Premiums Written</u>	<u>Premiums Earned</u>	<u>*Losses Incurred</u>	<u>Loss Ratio to Premiums Earned</u>	<u>Annual Premiums Potential of Writings to Date</u>
\$509,630.28	\$481,599.62	\$419,211.31	87.04%	\$293,385.44

*Losses Incurred include Claims Paid and Claims Outstanding, but do not include Loss Expenses.

Acquisition, Administrative and Promotional Expenses are not included in above figures.

Enrollment Experience

	<u>Insured</u>	<u>Dependents</u>	<u>Total</u>
Number of Participants	5490	9830	15,320

PHARMACEUTICAL DIVISION

Charles F. Van De Walle, Editor

THE PHARMACIST OF THE FUTURE

by Dr. E. R. Serles, Dean of Pharmacy
University of Illinois*

Mr. President, Members of the South Dakota Pharmaceutical Association:

First, I wish to extend greetings from the President of the Women's Auxiliary of the American Pharmaceutical Association, Mrs. Serles. Because of other duties she is unable to be here today, and she wished me to convey her apologies.

For myself, I can only say to you that nothing except an order from President Stoddart, and he is in Rome, could have kept me from making the flight of yesterday out here and the flight back this afternoon.

You followed my request in putting down, "The Pharmacist of the Future." I would like to take a moment to congratulate this association, and I am sorry that Mr. Foster has left, and his association for having continued the publication of the only joint professional expression there is in America with respect to the practices of medicine and pharmacy. I refer to your publication, which comes to you regularly, and which has been requested as far as the Orient and into the depths of Europe. It is an example of a positive inter-professional activity. While I am on that a moment, I would like to carry to Mr. Stebbins this very ingratiating and encouraging news, that the American Veterinary Medical Association will at its next council appoint two official delegates to sit in with the delegates of the American Pharmaceutical Association Council members to discuss this problem of the distribution of veterinary products throughout the length and breadth of this land. Fortunately, or unfortunately, Dr. Link of our own college of Veterinary Medicine is now the president of their association; and the Secretary Dr. Hardenbergh resides in Chicago. They are enthusiastic and signified

their willingness to establish such a cooperation on a nation-wide basis. Gentlemen, that is an announcement of great moment. Probably most of you are not aware that for fifteen years we have been endeavoring to secure the willingness of the Veterinary group to join with those of the health professions — not alone pharmacy — but of medicine, in carrying forward therapeutic values which are common to both animal and man; and to carry forward an intensive program of the expression of proper evaluation of those diseases which are transmissible from animal to man. It is highly significant that in this year 1950, we are able to report such an accomplishment. I sincerely hope that the medical and dental and pharmaceutical professions will reestablish the invitation which we ourselves proposed to them in this state some twenty years ago, which was not accepted at that time. Now this business of what shall be the pharmacist of the future? What is he now? He is the most important link in the progress of medical therapy that exists. I offer no apologies for this statement, nor do I feel embarrassed if I were to be speaking into a room full, packed solid full, of physicians and physicians only. While my good friend Mr. Foster was privileged to state that the American Medical Association seems to be very active, and quite successful, in securing the deferral of the Wagner-Murray-Dingle Bill, what he failed to tell you is that they were most vigorously supported by the American Pharmaceutical Association and the American Pharmaceutical Industry in being the first to publicize a code of ethics that clearly and positively stated their relationships of practice to the patient and to the physician. Speaking from my official position, as a representative of pharmacy on the national committee on the coordination of medical activities, I must tell you that neither

* As delivered before the South Dakota Pharmaceutical Association Convention in Sioux Falls, on Wednesday, June 14, 1950.

medicine or dentistry has seen fit to publicly declare themselves in a code of ethics with respect to their relationships of practice to the pharmacist, nor to the patient. The only written document to which they have subscribed is the ancient oath of Hippocrates, which they glibly require every medical graduate, and every dental graduate, to subscribe to before he receives his diploma. I hope that within the next six months the committee will be able to produce, not a code of ethics for pharmacy, nor for dentistry, nor for medicine, nor for nursing, nor for veterinary medicine, a separate code, but a joint and positive declaration of the position of the health profession with respect to the welfare of the patient.

My good friends, we of the professions of medicine, dentistry, and pharmacy, nursing, etc., are not without sin. Make no mistake about that. We have permitted within our own households the development of practices in the consideration of patient welfare to a degree that threatens our position in the realm of public esteem. You are going to think pretty soon that I am in favor of socialized medicine, but I am not. I am simply conscious of the fact that for fifteen long years we of the Health professions said no, no, no, a thousand times no to every intent of legislation to improve our own standards of practice. We have actually called down upon ourselves to some degree the attacks which are honestly and justifiably, my good friends, made upon us. I need only two or three examples to prove it to you beyond a question of a doubt. Those of you who were in this room some fifteen or twenty years ago, when we were struggling with the program of administering the relief monies incident to the dust-bowl days, know full well that we had about as much difficulty in keeping our own membership in line as we did the politicians. I actually sat on a committee to review prescriptions in which the price variance of the identical item ranged to more than three hundred percent. Some of the prices were way to low, others were far too high. I also reviewed some dental bills, and we found that one of our very good dentists in a very small town in the state of South Dakota, had prepared some three hundred complete dentures in one year, but the names of those individuals whom he had prepared the dentures

were firmly engraved on the tombstones of the local cemetery. We found pharmacists who, being very certain that they would have to wait a considerable period of time for their money, said now this is a four ounce prescription so we will use the legal procedure commonly accepted by pharmacists and physicians alike, to put four and an x on the face of the prescription, indicating that they were privileged to fill not four ounces but sixteen ounces. We found physicians practicing in their offices who were charging not only their normal fee, but double their normal fee, plus the cost of drugs which they did not supply, because under that program physicians could not get paid for drugs — they had to be dispensed through pharmacists. My good friends, until we can be absolutely sure our own house is clear we better be a little bit cautious about calling the man who has criticized us to some degree, economist, or any other elegant name that we choose to establish. It is up to us, as I see it, to so thoroughly clean our own house that there can be no question; and in consequence, we want to give thought too to the training of the teacher professional man — and a business man as well — as a practitioner of the profession.

Mr. Foster seemed to think this morning that physicians were not to be considered as business men — that he had paid fifteen dollars a day for a room in a rather swanky hotel, and he said, "But, what wonderful service; vallet, maid, air-conditioned, everything you could think of." You don't have to stretch your imagination very much, or go to many places, to find that you cannot have a small room in the hospital at much less than that, with all the additional charges and clinical charges from one end of the category to the other. In other words, I think we should talk and discuss among ourselves our responsibility, the economics of the procedure, so that we may not later be most seriously embarrassed in Congress by a complete portrayal of the charges made.

Now, from the standpoint of pharmacy, we are again the leaders in this development of health education, and I want to cite you a few examples. We want to pay tribute to the highly skilled, the efficient development of pharmaceutical research in industry, which is today without a peer in America, in the world. There is no university, however dis-

tinct, that has the facilities nor the staff, nor is willing to spend the money for the development of the newer therapeutic agents needed for the treatment of disease. Somebody mentioned ACTH this morning and Cortisone. I doubt if many of you know that ACTH has been known as a positive therapeutic product for eighteen years; and that eighteen years of costly research and investigation went into that product before it was given to a single patient. I doubt if many of you are aware that we had at the beginning of the war less penicillin than is necessary to inoculate a single mouse; and that within one year's time pharmaceutical industry had developed and delivered sixteen hundred million units of the drug. Before another year had passed it had prepared and developed and distributed to the fox holes of Okinawa twenty-one hundred billion units of penicillin. The original cost to the patient was first approximately seven dollars — and is now what? That was in a period of five years. You cannot point to any other activity of the welfare of human kind; clothes, food, transportation, anything you would want to name, that has by itself and for itself made that kind of a contribution to human welfare. That has come from pharmacy. I could go on and enumerate these things by the hour. I am conscious of, and know positively, of a company that produced twenty-two thousand different chemical substances before finding one satisfactorily established.

What does all this have to do with the program that comes before us. We must appraise the public, the man who is directly responsible for these activities. If you begin with 1844, with the discovery of ether down to now, you will find a new sound therapeutic agent presented to mankind every ninety days. So great have been these contributions, my good friends, that we are today without the evidence of smallpox. Four generations of medical students have graduated from the University of Illinois, in the heart of one of the most congested slum areas of America, without ever having seen a single case of smallpox. Their total knowledge of the disease is that of a text book, and why — simply because of vaccine virus. When a single individual happens to cross the boundary lines through Mexico to go to New York with a contagion of smallpox, you will find large

headlines announcing that there is within our one hundred and fifty million people one individual who has smallpox. We prepared and cared for fifteen million of armed forces personnel, and distributed where typhoid was rampant, with less than twelve hundred cases of even minor suspected typhoid having occurred. That, my good friends, is pharmacy. Not as you are accustomed to think it, because some of you have become too much involved with the question of whether or not you have the morning newspapers piled up in front of your front door before you unlock it; and piled up inside of your door at the closest possible hand reach on the theory that you are inviting customers into your store. You don't have to go into that store four feet to get that newspaper. If I wanted to advocate having newspapers to get people into my store, I would put them clear back in the rear room where the customer would have to walk by everything I had because I know and you know there isn't very much profit in setting up your window with a display of even the most prized cigarette today — Chesterfields. Yet, you call yourselves pharmacists.

I just wanted to leave you a few of those thoughts.

I want to finish up on socialized medicine—first, last, and all the time, with just one distinct statement. I believe it is the key to the whole business. Please forget that I even mentioned socialized medicine, just think of it in the terms of the total picture of you as a citizen. The United States government, or any nation's government, cannot return to its constituents one penny that it has not already received from the individual. If you will put that motto up in your store you will not need to talk democratic politics, republican, non-partisan, or anything else. I will defy anyone to show me where a government—county, state, or national — has an earned income unless it possesses and owns a business. You and I are the government, so you as a citizen have a responsibility to understand the economics of the life you live. You either spend your own money the way you want to, or you let your wife spend it the way she wants to. By your wife, I mean your government.

Let us look more specifically at the man who is to practice pharmacy. For the period of the last four years at least, we have been

diligently endeavoring to rationalize the development of an educational program which we hope will meet the needs of the future. In 1903 it was possible across this nation for one to become a licensed practitioner of pharmacy on the basis of an eighth grade education, and four years of practical experience. In 1914, we had raised the level of educational requirements to graduation from High School, in most of our states, not all, and four years of practical experience. By 1924, we had decreed that across the nation we would strive for the attainment of two years of college, or the Ph.G. degree, and two years of practical experience. By 1930 we had attained the stature of three years of college, and one and two years experience, depending upon the particular state; but in 1932 we nationally attained the level of requiring a bachelor's degree and a year of experience as the minimum requirement, with the exception of a few states. My face being very red, I must name Illinois first as having kept the back door open until July 1, 1951. It is still possible to come through the back door in the state of Illinois, provided of course that you were actually an apprentice on or before July 1, 1917.

I entered the apprenticeship training in my Uncle's drug store, a pioneer pharmacist of this state in 1906 and 1907. I distinctly remember he had two tooth paste products on the shelf — Dr. Graves and Dr. Lyons. How many today? Anybody try to name them. I remember too, that in that particular year of 1908 I was working in my Uncle's store and driving for a country doctor. We quarantined one hundred and twenty-three families in Canistota for smallpox. My Uncle thought that we had better have some vaccine, which he was able to get a little bit of from the Brown Drug Company. He thought he would get some diphtheria too, if possible, but he didn't succeed in getting that. He said, "Now, Earl, when you close this store tonight, bank that fire good and put that vaccine right on the shelf close to the stove so it will not freeze." That was in 1908, where are we today in the biological field? Name, if you can, the potentialities of preventive medicine through biological channels and you begin to see why the pharmacists of 1908 could not today cope with the responsibilities to the public unless he had studied diligently, as

many of you have from that day to new, concerning the new therapeutic agents that have come out. Out of necessity we have endeavored to expand our curriculum in direct ratio to the progress which we have made in the treatment of disease.

I was again attracted to the statement of Mr. Foster concerning the atomic bomb; and just as is the case with World War I, we have two choices — we either use the most potent weapon to destroy mankind or to save him. I might tell you that there has begun today in ten of our great universities, and in our manufacturing concerns, diligent study of radio active elements. We of the University of Illinois established and used the first betatron ray in the treatment of cancer. Unfortunately, that was publicized in Life magazine. While that patient today is much improved, he could not speak when he entered the hospital, he now speaks fluently, but there still must be a waiting period of five years before we can say that patient was cured. Dr. Harvey, who uses that machine, received on the morning after the release of Life publication one thousand telegrams from cancer sufferers, begging the opportunity to be treated. That was the tragedy of the publication. Now is this a concern of the pharmacist? Certainly, certainly. Because, there is going on in our universities and in our research organizations of industry, studies of the therapeutic dosage of radio active ions; of sulfur, of zinc, of sodium. We dare not take carbon since its half life is a span of not a few hours, or a day or so, but of years. Nevertheless you and I will definitely live to see the day when these products will come within the scope of therapeutic necessity, not convenience, not just something that's nice to say you have, but of therapeutic necessity. It will require the understanding of the field of physics that was contemplated in your High School days, or even in your college physics — even if you were taking engineering — to cope with that particular picture.

The activities of the drugs obtained from animal life is another field totally unknown to the pharmacist of 1908, almost unknown to the pharmacist of 1924, because the first dose of Insulin was given on August 7, 1922, in the Massachusetts General Hospital in Boston. That was the first therapeutic dose. It was understood and judiciously given. You must

know physiology in all its ramifications as thoroughly as does any other member of the Health profession. You need not know the anatomy of surgery. Very frankly, the medical people have come to realize that not all medical students need to know the details of surgical anatomy. They have come to realize that there are certain skills and requirements for a surgeon; and that probably some men would be better off if they had never been permitted to handle a scalpel at all, even in the dissecting laboratory. So much then for the basic things which seem to revolve around our professional activities.

Now, there are two other very significant areas that I wish to call your attention. At no time until in the period, probably the last five years, have we seriously considered training professional people to understand even the simplest principles of economics. I was very much intrigued to find Mr. Foster referring to the fact that the ancient Persians, and, if you will, you can go further back than that and find recorded in history, mens' understanding and realization of the fundamental principles of economics. In other words, either you and I have sufficient understanding of the basic values of money and its relationship to daily life, or we shall become chattels of bureaucratic organizations who will establish for us our wage opportunities. I was very much intrigued, while attending the A.Ph.A. meeting in Atlantic City, to find for the first time seated on the platform behind me, as a past president of the A.Ph.A., an official delegate representative from the Netherlands, Switzerland, Czechoslovakia, France, England, Israel, Egypt — professional men who had come across the water to see if they could not agree upon the basic principles in establishing an international pharmacopoeia; so that the drugs which now flow so fully from the heart of America to every corner of this world might be standardized by the same techniques and same values. They did not reach an agreement, and it is significant to know why they could not reach an agreement. It was very specifically summed up by Dr. von Os of the Netherlands when he said, "All this principle is fine, but the Netherlands, Switzerland, and these other countries are not sufficiently far advanced in scientific development to be able to meet the requirements. We of the Netherlands must

have a pharmacopoeia which permits standards of sufficient latitude to permit the pharmacists of our nation to manufacture in his own store everything except digitalis, insulin, and a few of the biological products. The rest we cannot handle." I was amazed to find that the Merck Chemical Company delivers to the pharmacists in the country of the Netherlands a product, which he himself must analyze before using, while you simply set down and write, "send me blue label-analyzed" this or that or the other thing. He cannot make his products until he starts out and analyzes the raw material, so he did not wish to have standards set which they could not meet. Then he went a bit further and said, "We have four million people in the Netherlands, four hundred and twelve drug stores, and one university. All people who wish to become pharmacists must receive a permit from the government to study it; and having completed the course he must receive a permit from the government to establish a store only when there are sufficient increases in population to warrant it." Need I tell you more? The same in Switzerland, in India — whom we have looked upon as one of those civilizations that we care little about — has adopted this very progressive step. They now screen out of twenty thousand students per year, five hundred to send to foreign countries; to pharmacy, to dentistry, to medicine, to law, to agriculture, to every activity in which they hope to engage, to every country in the world, so they may bring back to the government the best the world possesses. That is pretty significant in the field of education.

We already have in our pharmacopoeia those drugs which are marked P.I., meaning International Protocol, which have been accepted; but we have not reached the place where we could establish a common denominator for all. Dr. von Os, while visiting with me in my office in Chicago, made this other very distinct observation, "I see two very distinctly different patterns of thought in my country and in yours. In our country it is important that the physician care for the patient as rapidly as is possible; but it is wholly appropriate that when he brings a prescription to the drug store, we advise him that it may take from one to two days to fill it in order that he will get a good impression of its therapeutic value. Just the reverse in

your country. I wait several hours to eat, three months for my doctor, but I am very angry if I wait three minutes for my prescription." Something to think about, isn't it?

Our Association of Colleges has an equally difficult problem to consider. Should we take another drastic step forward in time and demand that a pharmacist have six years of college training, not all in pharmacy, but two of general college and four of technical pharmacy, so that we might — as some of them put it — hold up our heads in the presence of physicians, dentists, and veterinarians, in terms of calendar years, so that you might officially and appropriately be called Dr. — not as a nick-name, but as a professional man. Beware of that difference. It was the wisdom of the majority of the administrators of the colleges that we are not yet prepared to say that the scientific progress and development of the treatment of the patient warrants, or requires, that the man who practices pharmacy simply be measured by his qualifications in terms of years of education. A few of us were aware of the fact that no customer ever walks into any physician's office, or dentist, or pharmacist, or hospital, and starts to look for the diploma that hangs on the wall, unless he is an inspector. But, he is concerned with the ability of that individual to interpret for him satisfactorily his professional needs. Let us not forget that. The question then became one, not of measuring this period of training in calendar years, but rather measuring the man who entered the practice, and what we directed him to do while he was there. A mandate was established, as shown by the survey, to revise our curriculum and to include in it pharmaceutical administration so that the man might understand his business relationships with the manufacturer, with the customer, and with this very important fellow — the tax collector. He has been the fellow that has forced a lot of you good fellows to start keeping books. You wouldn't be keeping books today if it wasn't for the tax collector.

There is another thing that we have thought about, talked about a great deal, but have done very little about — that is to be dead sure that the individual who practices any of the health professions, first of all, is a desirable citizen. One who possesses the qualities of personal integrity, as reflected in

his character on every occasion and at all levels. Some of you might define that as honesty. A diligent man. He is pleasant to meet, he has a nice voice, wears good clothes, seems to understand all the proper procedures on social occasions, but in his heart and soul he is fundamentally dishonest. That man or woman has no place in the health professions. Ladies and Gentlemen, that is the greatest tool, second greatest tool, that is being used by my friend Oscar Ewing. He has propagandized the public into the thought that we of the health profession purposely hold back valuable therapeutic agents until just the proper time to release them — when business seems to be right. He has actually got them to thinking that. He has also got them to thinking that in our clinic organizations, the patient is not getting full value of the knowledge possessed by us in treatment of their disease. That has come about because we have considered it unethical to say some of the things to your customers that I have said to you this morning. A gentleman of my acquaintance, not too long ago, showed me a manuscript of his talk. I said to him, "Why don't you say right out in cold English what you mean by this rather covered up suave statement that you have." He said, "I wouldn't dare to do that, that wouldn't be appropriate at all." It is time, Ladies and Gentlemen, for pharmacists to stand up and shout from the house tops the services which you as a professional individual renders. But, you must be absolutely honest in your statements. I do not fear the loss of a single customer from any one store by any pharmacist who does not lower himself to the type of politics and say, "Don't vote for this fellow over here, but vote for this one over here because he belongs to my church." If you will just place the issues out where the individual can see them, he will judge that man awfully fast — just the same as you. We are proposing therefore that in the new curriculum to come that this man should receive fundamental course training in the humanities, history, political economy, sociology — and I would even go so far as to say that if it is not labeled as a specific religion, the principles of Christianity. I was confronted less than two months ago with a group of people who asked me to remove from our application blank the privilege of the individual to designate to which

church he belonged, even though it was not given any weight in the consideration of his admission to the institution. I said, "Gentlemen, your group are the first to appear at my door demanding from me a positive list of who belongs to your church." I said, "May I ask this question — Has it come to a place where you are so ashamed of your race and religion that you do not wish to offer it as public record of your integrity as a christian." The four gentlemen withdrew from the office. We must investigate those who are to enter the profession, even down to the relationship within the family home.

I know there are those who support the theory that one should be permitted to enter any college or university in America who is a graduate of an accredited High School. That would be fine if only we as tax payers could establish the type, number, and capacity of colleges and universities necessary to do that thing. In my own state of Illinois there will graduate this June fifty-nine thousand High School students by the end of June 22. That is the largest population of high school students in any state of the union. California comes next with about fifty-one thousand, Pennsylvania with forty-nine thousand, and New York with forty-eight thousand. I should have looked up your figures because it is so pertinent. Your sister state, Minnesota, has about twenty-four thousand. In 1908, less than three percent of all the high school graduates even thought of going to college. That's all! Today, across this nation from one side to the other between thirty-two and thirty-seven percent of high school students are demanding a college education. Our own president told the Board of Trustees that if we were to supply the equivalent of educational training in Illinois that was provided for in Minnesota, truly on the basis of population, we would have an enrollment within the University of seventy thousand, whereas we have physical capacity for less than eighteen thousand and are trying to accommodate twenty-nine thousand. Do not let anyone kid you into thinking that this is a GI proposition. It is not. There will come to the doors of educational institutions an increasing number of high school graduates, so we must prepare for a tremendous rise.

There are techniques, justifiable techniques, to measure mens capacities; level of

honesty, level of tax, the level of courtesy, level of vocabulary, and mathematical intuition. Now every one of you know exactly what kind of a clerk you want, but you have never taken the trouble to write it down in black and white so that from one clerk to another you could properly select that individual. That will require in our judgment your combined efforts. We are agreed that we like to have him in college, professionally training him for four years, possibly the fifth, but we are also pointing the finger at the one year of practical experience, still recognized by law, as being an education function of today of little value to the man's future success, and I know whereof I speak. We have established authentic tests on the values which you as pharmacists claim you were giving the boy when he was in your employ, and we find that he is actually learning less than twenty percent of what you claim he knows. In other words, you put him to work in your store with the privilege of selling anything that is there under your advice. Unfortunately you limit him in his opportunity to learn anything by telling him if the customer asks for something he knows nothing about, to refer that customer to you. You take over that customer and forget that the boy ever brought him back to you. Your own students have convicted you ninety times out of a hundred when the question has been asked, "Does the proprietor seek to instruct you after the question has been asked," and ninety-nine times out of a hundred the students have said "No." We are going to ask the serious consideration of America's retail pharmacists to either accept greater responsibility for this year of experience, abolish it entirely, or coordinate it with college training, which would then leave us with a total span of a five year program with only the Baccalaureate degree established. In the field of Nursing Education they have practiced this for more than ten years; yes, fifteen. In Engineering, they began it a quarter of a century ago, but have only formalized it in five institutions within the last three years. That then pictures some of the things we will expect, or should expect — and justly so — of the pharmacists of the future.

I have purposely omitted from this discussion all reference to whether chain outlets are decreasing or increasing, whether the

professional stores are increasing or decreasing, because I firmly believe that the determining factor in those areas is entirely dependent upon the quality of the training and integrity of the man practicing. If we enable him to understand in course procedure, what Mr. Stebbins was attempting to give you here in thirty minutes, background of animal diseases, then and only then will he be an intelligent salesman of those products. That provision was established by our removing five years ago from curricular requirement of the American Association of Colleges of Pharmacy any fixed schedule of subjects. Any college today can establish its own curriculum so long as it gives consideration to the basic sciences and appropriate consideration on the actual theoretical and practical pharmacy, the rest to be electives of choice, and the development of this man is a responsibility of the college which accepts him.

I cannot refrain, Gentlemen, from stating to you in behalf of your Dean that your college of pharmacy does not belong to him, neither is it his responsibility to finance it. That is yours. For twenty-five long years I was forced to divide nickles and pennies and pennies again in order to buy the meagerest amount of equipment and supplies, which the majority of those sitting in front of me were privileged to use. I was forced to offer as compensation for staff members salaries which were below that which you are offering your clerks in the store, yet again and again you chided me that the college of pharmacy was doing an inadequate type of training for the man you needed. When it came time to get an appropriation through the legislature, you were the hardest men on earth to find, and especially those who criticized me most. I thought I had done something to offend you — couldn't even get you to answer your telephone, you were out. Gentlemen, you cannot have a college of pharmacy in this state until each one of you become conscious of the fact that you are a stockholder in, and definitely responsible for its budget, its staff, its opportunities, so that your own sons and daughters need not be denied as they are being denied today, even the privilege of admission, say nothing of the opportunity to meet the challenges of education.

Just as Oliver Wendell Holmes, in speaking to a graduating class of his institution,

speaking to them as an alumnus, made this profound announcement:

"No man has earned the right to intellectual ambition until he has plotted his course by stars which he may never see; till he has dug with the divining rod for springs which he shall never reach; only when you have worked alone; when you have felt around you a black gulf of solitude more deep than that which surrounds the dying man; and in hope and despair you trust to your own unshaken will — thus only can you achieve; thus only will you enjoy the sacred privilege of the thinker, who knows that a hundred years after he is dead and gone, men who never heard of him will be moving to the measure of his thought, which the world knows not because it has no external trappings, but to which his profetic vision is more real than that which commands an army." Thank you.

MEDICAL ETHICS FROWN ON PHYSICIAN-OWNED PHARMACIES

Washington, D. C. (Apr. 11) — At the 1949 Jacksonville Convention of the American Pharmaceutical Association, President Ernest Little in his annual address called attention to the rapid increase in the number of physician-owned pharmacies, usually as a constituent part of privately owned medical clinics. In commenting on this development President Little stated, in part, "The most serious aspect of such a development is not that the physician receives a financial profit at the expense of the pharmacist but that it might cause (1) deterioration of pharmaceutical service, (2) development of monopolistic practices, (3) denial to the patient of free choice of pharmacist and (4) deterioration of relations between medicine and pharmacy."

After consideration of this matter in the House of Delegates a resolution was passed expressing disapproval of the establishment of pharmacies in clinics operated as part of a physician-owned clinic service. The resolution was subsequently transmitted to the American Medical Association and, through State Pharmaceutical Associations, to the State Medical Societies.

In an editorial appearing in the April issue of the **Practical Pharmacy Edition of the Journal of the American Pharmaceutical As-**

sociation. Dr. Robert P. Fischelis, secretary of the Association, reports that the American Medical Association referred the resolution to the Judicial Council of the A.M.A. and that the Council, at its last meeting, gave consideration to the question and voted "it is unethical for a physician to make a profit on anything except his professional services." This is in line with the Principles of Ethics of the American Medical Association.

"Thus," states Dr. Fischelis, "the American Medical Association supplies a clear cut answer to the issues of physician-owned pharmacies and physician's dispensing of medicines. Let pharmacy give an equally forthright answer to the practice of counter prescribing."

PHARMACY SECRETARY RAPS FOOD, DRUG HEADS

Washington, D. C. (Apr. 15) — Taking issue with the Federal Food and Drug Administration in its interpretation of the prescription sections of the Food, Drug, and Cosmetic Act, Dr. Robert P. Fischelis, Secretary of the American Pharmaceutical Association, in an article entitled, "The Pharmacist's Right and Duty to Exercise Professional Judgment," appearing in the current issue of the **Practical Pharmacy Edition of the Journal of the A.Ph.A.**, pointed out that the present interpretation placed by the Administration on authority to renew prescriptions was without the sanction of the Federal Food, Drug and Cosmetic Act.

After citing the established relationship between physicians, pharmacists and the public in prescription dispensing, the writer pointed out that Commissioner Dunbar of the Federal Food and Drug Administration had supplied his own definition for the term prescription, a term which is not defined in the law. It is a matter of custom for physicians to send their patients to the pharmacist for a renewal of prescriptions if and when renewal of the medicine is desired. The physician and the patient expect the pharmacist to renew the prescription unless the physician specifically requests that it be filled but once.

Commissioner Dunbar of the Food and Drug Administration was represented as likening the prescription to a check on a bank, which, when once cashed, cannot be

made use of again. This analogy is not valid, according to Dr. Fischelis, because it has been the custom in the United States for physicians to specifically mark their prescriptions with the letters "N.R.," indicating no renewal whenever it was desired that there should be no renewal of the prescription.

Dr. Fischelis also pointed out that the narcotic laws and certain dangerous drug acts of the various states prohibit renewal of prescriptions for such drugs and that pharmacists automatically observe these laws and that they are competent to use professional judgment and discretion in determining which prescriptions should or should not be renewed without contacting the prescriber personally.

The fact that most pharmacists are aware of the desires of physicians with respect to renewals, either from understandings reached over long periods of medical and pharmaceutical practice, or from the direction not to refill, provides a sufficient safeguard against unwarranted renewals.

The interference of the Food and Drug Administration with the relationship between physicians, pharmacists and their patients is looked upon as an encroachment on the jurisdiction of states over the practice of the various professions. It is felt that the professional practice acts in the various states give ample authority to the state law enforcement officials to properly safeguard the health and lives of patients. This, coupled with the exercise of professional judgment on the part of pharmacists in the matter of prescription renewals, is considered better protection for the public than can possibly be supplied through Federal intervention, which, at best, must be limited because of the limitations of the Federal enforcement machinery.

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R. J. Quinn, M.D.

**SOUTH DAKOTA'S
GENERAL PRACTITIONER OF THE YEAR
1950**

R. J. Quinn, M.D., Burke, South Dakota, has been selected General Practitioner of the Year for 1950 by the Council of the Medical Association.

Dr. Quinn's name will be presented to the Board of Trustees of the American Medical Association in competition for national honors.

Dr. Quinn is one of the pioneer physicians of Gregory county, having opened his office in Burke in August, 1913, eight years after the homesteaders arrived to make settlement on the land they had won in the famous Rosebud land lottery of 1904.

He received his early education in the rural school of his home district, attended the Springfield high school and later graduated from Springfield Normal. After graduating from Springfield, he taught school and proved up on a homestead near Nowlin, in what is now part of Haakon county.

He continued his education by attending the medical school at Creighton University, Omaha, graduating with an M.D. degree. He served his internship in St. Joseph's hospital in Omaha.

In 1911, he was married to Miss Winifred McCarren, an instructor in the Springfield Normal. Two sons were born to them. Robert Jr., now a Lieutenant Colonel in the U. S. Army attached to the military intelligence service, Air Corps. in occupied Germany; and James, a graduate in medicine of the University of Michigan, who died in April, 1950 while serving as an interne in California.

Post-Operate Wound Dihiscence and Eventration

A REPORT OF TWENTY EIGHT CASES

Dr. John A. Kittelson, M.A.; M.D.; F.A.C.S.

and

Dr. H. O. Kittelson, M.D.

The last few years have seen considerable change in the post-operative care of laparotomy patients. Early activity in the upright position is now considered desirable. Formerly, it was considered good post-operative care to keep a laparotomy patient in bed for eight or nine days, or even somewhat longer, before allowing him to assume the upright position. Drains were common. Adhesive strapping and abdominal binders were used more generally. Tension sutures were used in both clean and infected cases. Meteorism was a common and distressing sequela, where the laparotomy patient had encountered a localized peritonitis. Lately, the almost universal use of the nasal tube and the advent of the Wangenstine tube have lessened the seriousness of meteorism and its added tension on the laparotomy wound. Walking around the bed twenty four hours after abdominal surgery is encouraged. It is granted that this may be an aid to aged patients under certain conditions. However, the impelling reason for the early post-operative activity seems to be the fear of thrombophlebitis and phlebothrombosis. It is possible that frequent turning of the patient and the passive emptying of the leg veins and pelvic veins would be just as effective in preventing the stagnation of the venous blood return. It would seem that the usual apprehensive and staggering efforts at walking made by most laparotomy patients during the first few days following operation could do little to help the pelvic veins empty against the force of gravity. Possibly, some method making use of gravity would do more. Is it not possible that good intelligent nursing care would do as much or more for the patient with less risk? Just what is the risk to the patient of early post-operative activity? One of these risks is considered in this paper.

It seems reasonable to wonder about the various stresses and strains going on in a laparotomy wound. Which is the stronger,

the chromic catgut or the tissue it approximates? Are the stresses greater in the upright position? They probably are, but the statistics seem to show that there are greater stresses and more dangerous ones than just being upright. The lateral pull of the weight of a thick walled abdomen must be considerable. We know that this weight often causes tears in the freshly sewed peritoneum. Furthermore, cough, vomiting, and meteorism undoubtedly cause stresses far in excess of that caused by assuming the upright position. It must be remembered, however, that in normal healing of non-infective tissue, there is a lag of several days. Howes and co-workers (1) claim there is a lag of between four and six days. During this period, they say, the tensile strength of the tissue of the wound is zero. Then, the tensile strength of the wound rapidly increases, reaching its maximum at about the fourteenth day. So, for at least six days, the walls of the wound must be held together by the sutures alone. These sutures must not be tied so tightly that they cause necrosis, yet there must be tissue contact between the two walls of the wound.

With these questions in mind, the authors decided to examine the local hospital records, for the last four years, for cases of wound disruption and evisceration following laparotomy. Such post-operative accidents do not occur often, but when they do occur, the results are often disastrous. The hospital records of Sioux Valley Hospital and those of McKennan Hospital, both of Sioux Falls, S. D., were therefore examined for the four years of 1946 to 1949 inclusive. The pertinent data are given in tables 1 and 2. Twenty eight cases of wound dehiscence and eventration were found in a series of about 6000 laparotomies. The cases were scattered among ten local surgeons and small surgical groups. Two associated surgeons had seven cases. Two other associated surgeons, had six. Three surgeons had three each and the

TABLE NO. 1, SHOWING PRE- AND POST-OPERATIVE CONDITION OF PATIENTS AT McKENNAN HOSPITAL

Hospital No.	Sex	Age	Date	Type of Operation	Site of Operation	Axis of Incision	Type of Suture	Drainage or not	Pre-operative Blood Picture	Post-operative Day of Eventration	Method of Re-suture	Result
87952	M	69	8/31/49	Appendectomy	McBurney	Longitudinal	Plain \pm 0; wire for fascia	0	Hg 84% R 4,200,000 W 7,800	11	Through & through wire	Good
90499	F	59	10/2/49	Cholecystectomy	Right upper rectus	Longitudinal	\pm 00 chromic; \pm 00 chromic for fascia	Pen-rose	Hg 100% R 4,960,000 W 10,000	17	Not mentioned	Good
70502	F	54	7/5/46	Twisted ovarian cyst	Lower abdomen	Longitudinal	Not mentioned.	0	Hg 100% R 4,800,000 W 7,200	15	In layers with silk and tension sutures	Died
71959	M	50	10/4/46	Perforated peptic ulcer	Right upper rectus	Longitudinal	Plain cat-gut and interrupted \pm 0 chromic	0	Hg 95% R 4,900,000 W 15,300	8	Through & through 2 silk	Good
76024	M	49	6/14/47	Acute appendectomy	Lower right rectus	Longitudinal	Not mentioned	0	Hg 102% R 5,100,000 W 18,500	14	Wire for fascia; silk for skin	Good
79493	F	45	6/14/48	Obstruction	Right mid-rectus	Longitudinal	Not mentioned	0	Hg 97% R 4,640,000 W 18,400	10	Plain cat-gut; chromic catgut for fascia; silk-worm tension suture	Good
80248	F	66	2/23/48	Cholecystectomy	Right upper rectus	Longitudinal	Plain \pm 0; interrupted chromic for fascia	0	Hg 77% R 4,100,000 W 6,500	9	Through and through with wire	Good
80987	F	43	4/11/48	Cholecystectomy	Upper right midline	Longitudinal	Plain \pm 0; chromic \pm 0 continuous and interrupted; skin clips	Pen-rose	Hg 77% R 3,960,000 W 7,250	11	7 wires through and through; 10 interrupted chromic \pm 1	Good
81841	M	63	5/31/48	Perforated duodenal ulcer	Split right rectus	Longitudinal	Plain \pm 0; continuous and interrupted chromic, \pm 1 4 silkworm gut sutures	Pen-rose	Hg 88% R 4,270,000 W 11,000	11	Wire in fascia; silk in skin	Good
85134	M	62	12/17/49	Chronic duodenal ulcer	Upper right rectus	Longitudinal	00 chromic cat-gut; interrupted chromic \pm 0 catgut for fascia; silk for skin	0	Hg 95% R 4,690,000 W 9,400	15	Not mentioned	Good
79124	M	42	9/7/42	Gastrectomy; also gastro-enterostomy	Right upper rectus	Longitudinal	\pm 0 chromic; interrupted \pm 20 cotton for fascia; silk for skin	0	Hg 104% R 5,410,000 W 16,000	23	Not mentioned	Good
89003	M	45	7/4/49	Ventral hernia	Elliptical incision	Longitudinal	\pm 1 chromic; \pm 30 wire for fascia; sub-cutaneous wire for skin	0	Hg 91% R 3,550,000 W 11,400	13	Under novocaine; 7 wire sutures in skin	Good

remainder were scattered among five other surgeons, each of whom had one case. One old man had an exploratory laparotomy for cancer of the stomach at a neighboring clinic and was permitted to return to Sioux Falls on his fifth post-operative day. He had to be hospitalized at once for dehiscence of the wound and eventration. There were two fatalities among the twenty eight cases. This is a surprisingly low mortality, considering the extreme seriousness of this formidable surgical complication. (Table 1.)

It should be mentioned here that the sur-

gical staffs of McKennan Hospital and of Sioux Valley are identical. The same surgeons belong to the staffs of both hospitals. The conditions prevailing in the operating rooms, the type of suture material used, the surgical technique and the post-operative care are as nearly identical as it is possible to make them in two separate institutions. We therefore grouped the total number of laprotomies in the two institutions together for the four years. As previously mentioned the total number was nearly six thousand. This gives the incidence of

laparotomy wound dehiscence and eventration in Sioux Falls, S. D. as 0.46%, which is very low and very satisfactory.

In the available literature at hand, there is only one report which shows a lower percentage of incidence than ours. Schmitz and Beaton (2) in 1942 reported a series of 1300 laparotomies, during the years 1933 to 1940. Their incidence of dehiscence and eventration was only 0.15%. However, they also reported a series of 10,725 laparotomies by others, and in this series, the incidence of dehiscence and eventration was 1.83%. Singleton and Blocker (3) in 1939 reported on a series of 9000 laparotomies and found the incidence of dehiscence and eventration to be 0.8%. They also found 160 additional herniae and if these were added to their 71 cases of dehiscence and eventration, their incidence would rise to 2.56%. The highest incidence of 3% was reported by Hesse (quoted by Rakhman (4)) in 1932. These various percentages of incidence are all very low considering the fact that all types of laparotomies are included. Any incidence increase due to old age, to infection, to debilitating diseases or to other pathology of the lesion for which the laparotomy was performed is also included in the above percentage.

In the twenty eight cases herein reported, there were only two deaths. A true mortality percentage can hardly be given, since we have only twenty eight cases. However, if we allow ourselves to project our percentage mortality from twenty eight cases to one hundred cases, we get a mortality rate of 7.14%. This is the lowest mortality rate we have found so far in the literature, being about five times less than that reported in other series. Schmitz and Beaton (2) had a mortality rate of 68.7% and give the overall average as being 34.8%. Hartzell, Winfield and Irwin (5) give their mortality as 35% which is identical to that of Fallis (6). Trueman (7) gives his mortality as 33%. Since the mortality rate throughout the country is consistently very high, it is most fortunate that the incidence is mostly low.

(Table 2.)

Singleton and Blocker (3), reporting on 9000 laparotomies in 1939, indicate that dehiscence and eventration of a laparotomy wound may not alone be the true index of

wound disruption. They think that post-operative herniae should also be added. Their opinion is that where there is a post-operative hernia, there must also have been wound dehiscence in the deeper layers. The difference between hernia and dehiscence is one of degree only. For a post-operative hernia to occur they assume that the peritoneum, the peritoneal fascia, the rectus muscle and the anterior rectal fascia have all spread apart. They feel that the cause of the disruption is usually some intra-abdominal force, like the pressure of meteorism, actually tearing the tissues apart. Several other authors mention poor hemostasis as a cause, the resulting hematoma forcing the walls of the wound apart with hydrostatic pressure. We want to mention the accidental substitution of plain catgut for chromic catgut as a possible cause. The plain catgut would in all likelihood be absorbed before sufficient healing has taken place in the wound.

The pathological conditions requiring these twenty eight laparotomies are given in tables 1 and 2 and the site of incision is of major importance. Nine patients were operated for duodenal ulcer and eight patients were subjected to a cholecystectomy. Of the remainder, one case was operated for cancer of the stomach, two cases for umbilical hernia, one case obstruction, three cases for appendicitis, one hysterectomy, one ilio-colostomy, one recto-sigmoid cancer and one case of twisted ovarian pedicle complicated with ilius. The data in tables 1 and 2 therefore, show that out of twenty eight cases of dehiscence and eventration, twenty of the laparotomies were in the upper abdomen. Of the remaining eight cases, five had considerable meteorism.

Trueman (7) stated that in his 1947 series the commonest site of dehiscence and eventration was the area between the umbilicus and the xyphoid cartilage, especially in mid-line incisions. He felt this was due to the strong lateral pull of the costal margins during coughing and other abnormal types of respiration. Vomiting would, of course, be listed as one of these causes. We feel that meteorism is a basic cause and works in conjunction with other causes breaking the apposition of the wound. Allergic reaction to catgut has been mentioned by Fallis (6) as causing disruption of wounds. In such

TABLE NO. 2, SHOWING PRE- AND POST-OPERATIVE CONDITION OF PATIENTS AT SIOUX VALLEY HOSPITAL

Hospital No.	Sex	Age	Date	Type of Operation	Site of Operation	Axis of Incision	Type of Suture	Drainage or not	Pre-operative Blood Picture	Post-Operative Day of Eventration	Method of Re-suture	Result
86442	M	66	1/1/46	Ileocolostomy	Upper right rectus	Longitudinal	2 chromic for fascia; four silkworm guts; silk for skin	0	Hg 98% R 5,060,000 W 10,400	10	Not mentioned	Good
67329	M	38	12/46	Cholecystectomy Gall bladder aspirated	Upper right rectus	Longitudinal	0 plain; No. 1 chromic for fascia; skin clips	Unknown	Unknown	5	Not mentioned	Good
67606	M	54	1/47	Perforated duodenal ulcer	Upper right rectus	Longitudinal	Plain 1 closure chromic 2 for fascia; 4 silkworm guts for tension	Unknown	Hg 82% R 3,700,000 W 15,000	21	Not mentioned	Good
68460	M	55	2/47	Perforated gastric ulcer	Right rectus muscle split	Longitudinal	Plain 1; wire for fascia; skin clips	0	Hg 88% R 4,000,000 W 20,000	6	Not mentioned	Good
87506	M	39	2/47	Perforated duodenal ulcer	Right rectus muscle split	Longitudinal	Plain 0 for closure, chromic #2 for fascia; silk for skin	Penrose	Hg 84% R 3,440,000 W 8,000	10	Not mentioned	Good
83514	F	52	2/48	Hysterectomy	Mid-line incision	Longitudinal	Chromic #0 Closure chromic #1 for fascia; skin clips	0	Hg 90% R 4,000,000 W 7,300	12	Through and through silk sutures	Good
85578	M	40	10/48	Cholecystectomy	Upper right rectus	Transverse	Layer by layer with chromic catgut. Skin clips	0	Hg 102% R 5,000,000 W 7,800	8	Through and through with chromic 0	Good
90944	M	59	5/49	Cancer of the stomach	Upper mid-line	Longitudinal	Not mentioned	0	Hg 80% R 3,290,000 W 7,250	8	Chromic 1 interrupted	Good
93844	M	61	8/49	Cholecystectomy	Upper right rectus	Longitudinal	8 extra interrupted chromic for fascia	0	Hg 95% R 4,500,000 W 11,300	10	12 tension sutures through and through; chromic #1 in fascia	Good
90357	M	73	11/15/48	Duodenal Ulcer	Left mid-line	Transverse	0 pain catgut; wire for fascia; cotton for skin	Penrose	Hg 82% R 3,330,000 W 7,800	4	#1 chromic catgut	Good
87329	F	22	7/17/47	Umbilical hernia	Elliptical	Transverse	Plain catgut; #2 chromic for fascia; silk for skin	0	87% R 4,380,000 W 9,100	8	10 interrupted silkworm gut sutures Silk for skin	Good
85234	F	72	10/13/48	Cholecystectomy	Mid-line	Longitudinal	Chromic 0 Closure; steel wire for fascia; skin clips	Penrose	Hg 86% R 4,320,000 W 11,500	40	Through and through steel wire	Good
83799	M	71	8/22/48	Recto-sigmoid resection for cancer	Left lower rectus	Longitudinal	Interrupted silk in posterior fascia Wire in fascia and skin	0	Hg 85% R 4,040,000 W 27,000	9	Through and through wire	Good
71230	M	53	5/28/47	Perforated duodenal ulcer	Upper right rectus	Longitudinal	Plain 0 catgut and wire for fascia Silk for skin	0	Hg 98% R 4,210,000 W 21,600	9	Through and through steel wire	Good
72464	M	72	7/8/47	Duodenal ulcer	Upper abdomen	Transverse on both sides	#0 chromic; #0 chromic interrupted for fascia. Skin clips	0	Hg 80% R 3,060,000 W 6,000	15	Through and through using heavy silk	Died
70878	M	77	5/14/47	Acute appendicitis	Right mid rectus	Longitudinal	Plain catgut; interrupted chromic mattress sutures for fascia Silk for skin	0 Sulfathiazole crystals	Hg 84% R 3,850,000 W 10,100	9	10 through and through silkworm guts. Silk for skin	Good

cases he thinks that the serum incident to the acute reaction breaks the wound apposition by hydrostatic pressure. Every surgeon sees several cases every year who de-

velop considerable amounts of serum in the wound, enough to delay healing. These serum accumulations are not true stitch abscesses and we believe most of them

could be classified as allergic reactions. Rakhman (4) lists severe anemia as a cause of wound disruption. Tables 1 and 2 show several cases among our twenty eight, who were moderately anemic. Naturally, if the chemical elements required for healing are below requirements, the time for healing will be greatly increased. Hence, taking the stitches out on the seventh, eighth or ninth day will certainly be followed either by hernia or dehiscence and eventration.

All of us have had trouble closing laparotomy wounds in fat patients. After the operation, there is just as much room as before the operation, sometimes more. But the weight of the two sides of the cut abdomen is too much for the edge that is sewed. The catgut holds but the tissue unravels. The weight of these heavy loins we shall refer to as "loin sag." We believe that in many cases this loin sag is sufficient to tear the catgut from the fascial strands at the wound edge. Of course, other strains and stresses are added. But the "loin sag" is a constant heavy pull causing wound necrosis and fraying of the fascial edge. Holding up such loins with the hands makes the closing of the abdomen much easier, and we believe, that a well fitting abdominal binder will aid greatly in taking the stress of the sewed edge of fascia.

With the above idea in mind, we examined the twenty eight histories to determine the type of incision used. A rather large number of laparotomies are performed in Sioux Falls using the transverse or cross incision, especially in the upper abdomen. Among the twenty eight cases of dehiscence there were twenty five longitudinal or muscle splitting incisions, one elliptical incision for umbilical hernia and two transverse incision were used. These data are too few to truly evaluate the transverse incision in laparotomies. It is our opinion, however, that it is the incision of choice in fat people, where there is considerable "loin sag."

How soon after operation does dehiscence and eventration occur? Schmitz and Beaton (2) state that the average time is seven days. Trueman (7) states that in his series of eighteen cases, it occurred as early as the third day and as late as the thirty ninth day. With Zhivatoff (8) it occurred on the eighth and tenth days. In the series reported by Norris (9) 77% had their dehiscence and even-

tration between the fifth and eighth days, with the longest interval between operation and eventration being 12 days. Postnikov (10) had a case on the fourth day. Then, he reports, the same case had dehiscence and eventration twice more, on the eighth and on the eleventh day. This male patient was host to a large intestinal paracite which caused obstruction and severe anemia. This is a very important cases, since the severe anemia undoubtedly caused the triple dehiscence. Meleney (11) stated, in his fifty cases, dehiscence and eventration occurred in the seven to ten day interval after laparotomy. In the series of eight cases reported by Nisnewish (12), three cases occurred on the eighth day, three on the ninth, two on the tenth and one on the eleventh day.

Ordinary post-operative activity does not seem to be a vital factor in bringing about dehiscence and eventration. In the literature perused, only Meleney (11) mentions activity as a serious cause. Even he describes it as overactivity and puts it with disoriented activity of excitement. In connection with this he states that eventration is twice as common in men, and more so after forty. He does not condemn early minimal activity performed soon after laparotomy. We feel, that when no other known cause of dehiscence and eventration is present, then early minimal vertical activity alone will not produce dehiscence and eventration. We feel that meteorism should be rectified, cough ameliorated and the wound inspected before the patient is allowed to be in the vertical.

Norris (9), lists a great amount of serosanguinous fluid on the dressings, his "terra cotta stain," as the commonest presenting sign of dehiscence. Lahey agrees with this observation but adds that cases with persistent vomiting and symptoms of obstruction should also have their wounds inspected. While this "terra cotta stain" usually is bloodtinged and may be serum seepage from a hematoma, it is not the result of active hemorrhage. It could very well be a serum outpouring due to allergic reaction to catgut. In these cases, there is certainly enough serum in quantity to cause some hydrostatic pressure forcing the apposed walls apart. There can be no primary healing without apposition. Since the strength of a healing wound is zero up to the sixth day, most

cases of dehiscence would probably occur before that time—the day they become evident is another matter depending on how often the wound has been inspected. Symptoms of obstruction and persistent vomiting should make the surgeon think of a knuckle of intestine being caught in the wound. If so, it would either have to be caught in the stitches or have been forced into the wound through a slight gaping of the wound walls.

Almost every author mentions nutritional deficiency as a possible cause of dehiscence. But only Hartzell, Winfield and Irwin (5) have actually performed chemical analysis of importance. In 1941, they examined 515 cases of stomach cancers and peptic ulcers and proved that they all had nutritional deficiency. They had only one-fourth normal amount of ascorbic acid and considerable less serum protein than normal. Since operations to correct these lesions would all be made on the upper abdomen, the above datum might explain, in part at least, the fact that about 70% of dehiscences occur high on the abdomen.

There can be no question but that fascial thickness and strength differ in different people. It is a common observation of surgeons that some peritoneums tear very easily and have to be resutured. In such cases, great dependance is placed on the chromic sutures holding the anterior layer of the rectus fascia in apposition. If the strands of connective tissue making up this fascia should fray in one or two places, an area of complete absence of strength results. These strands do not fray often but it does happen. Such weakness is often noticed when sewing the fascia of fat patients, where the loins sag because of their own weight. We believe that a small fascial gap can easily be enlarged into a true dehiscence by the appliance of one or more other causes of increased stress mentioned above.

This actual fraying of the fascial edge can be circumvented by using the transverse abdominal incision. Examination of a greater number of cases should prove this, since it seems logical. There would still be a small number of patients, whose fascia would be too weak to support any kind of suture; even the slight weakening effect of making a series of needle holes to place the chromic catgut would cause tearing. In these

cases grafts of fascia lata would be needed. However, a transverse incision has less strain on the sutures and should be the incision of choice in fat patients.

After considerable experience with interrupted steel wire fascial sutures and with steel wire through and through tension sutures, it can be stated that steel wire is exceptionally free from tissue reaction. Very seldom is there serum seepage around the skin openings and low grade infections in these suture openings is still rarer. We use a curved cutting needle on each end of the wire tension suture, starting within the wound and pushing the needle through the skin. Each needle is used only once to avoid skin contamination.

When five or six steel wire tension sutures are used and tied over the assistants finger to insure against over-tightness, the skin clips or sutures can come out at the usual time. The wire tension sutures may be left in place for two or even three weeks. They cause only slight discomfort to the patient. The surgeon can comfortably dismiss the worry about wound eventration. The abdominal scars are narrower and more satisfactory in every way. So called stitch abscesses occur very seldom in clean wounds. Finally, if there should be dehiscence of the deeper part of the wound, the wire sutures are already in place and the patient saved the shock and expense of a second operation. Since it is very difficult to explain satisfactorily to the patients family why sutures give way and why a wound reopens, it is certainly much better to place a few wire tension sutures at the time of the operation. These surgical complications can happen to any of us, but let us protect our patients as well as ourselves.

SUMMARY

1. Six thousand laparotomies performed in Sioux Falls, South Dakota, have been reviewed for the complication of dehiscence and eventration.
2. Twenty-eight cases were found, with two deaths, over a four year period, 1946 to 1949 inclusive.
3. The percentages are among the lowest in the entire United States.
4. "Loins sag" is discussed, as well as other causes of dehiscence and eventration.
5. Transverse abdominal incision is recommended as the incision of choice in fat people.

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(Continued on Page 295)

Purpura Hemorrhagica

CURRENT KNOWLEDGE CONCERNING BLOOD COAGULATION AND ITS
RELATION TO VARIOUS HEMORRHAGIC DIATHESSES WITH EMPHASIS ON
IDIOPATHIC THROMBOCYTOPENIC PURPURA

BY

MARY ELIZABETH SANDERS, M.D., REDFIELD, S. D.

At the present time, the process of coagulation of the blood is considered to be divided into three stages.

- (1) Thromboplastinogen - platelet enzyme (thromboplastinogenase) thromboplastin
- (2) Prothrombin - thromboplastin thrombin
- (3) Fibrinogen - thrombin fibrin
(Modified after Quick and Doan)

As can be seen, both platelets and plasma factors are essential for completely physiologic blood coagulation. In addition to this, injured tissue is believed to release thromboplastin, and the platelets have the additional function of a second enzyme which promotes vasoconstriction of the local capillary bed as an aid in prompt coagulation.

Prothrombin is supposedly present in plasma in both the free and a combined form, prothrombinogen; and it may be that plasmin (a proteolytic enzyme in plasma also known as serum trypsin, fibrinolysin, etc.) acts as an accelerator in the production of free prothrombin from prothrombinogen.

It is known that there is a direct relationship between prothrombin and thromboplastin, and that the consumption of prothrombin in any given coagulation reaction is directly proportional to the amount of thromboplastin available which, in return, is a function of the available platelets.

Dicumarol's anticoagulant effect is mediated by the lowering of the plasma prothrombin level. **Heparin** acts by inhibiting the prothrombin conversion and the thrombofibrinogen reaction. Retraction of the clot in time and degree is directly proportional to the excess of platelets. When the number of platelets is reduced, therefore, the speed of the prothrombin consumption is decreased; and below a certain level, a serious defect in coagulation is present, although there is a normal coagulation time. In the presence

of an adequate number of platelets, the first thrombin formed acts on the platelets so that there is a speed-up in the release of thromboplastinogenase with more rapid clot formation.

As can be seen by the above discussion, a clinical bleeding tendency can occur under a wide variety of circumstances and be caused by any one, or more, of the factors involved. It may appear as an asymptomatic transitory purpura limited to the skin or mucous membranes, or it may be an acute fulminant hemorrhage constituting a real emergency.

In order to make an accurate diagnosis and arrive at the proper therapeutic regimen, one must keep in mind certain broad principles of the clotting mechanism. The first thing to determine in an emergency is whether the thrombocytes are normal or decreased in the peripheral circulation. Thus broadly one can divide these clinical states into non-thrombocytopenic purpura and thrombocytopenic purpura.

Let us first briefly consider the causes of non-thrombocytopenic purpura. These can be divided into (1) specific plasma defects and (2) specific capillary defects.

The plasma defects include hypoprothrombinemia and hyperheparinemia, anti-hemophilic globulin deficiency, and fibrinogenopenia. Hypoprophthrombinemia is seen in a variety of clinical states. It is found in melena neonatorum or hemorrhagic disease of the newborn. In obstructive jaundice, we may have a lack of prothrombin because of the absence of bile interfering with the proper absorption of Vitamin K. Severe liver disease may cause a lack of prothrombin either because of the lack of bile, but more frequently because the liver is unable to convert Vitamin K into prothrombin. Patients with hyperperistalsis or other intestinal disease may also have a hypoprothrombinemia because of a lack of absorption of Vitamin K.

* Read at meeting of Aberdeen District Medical Society April 25, 1950

Hyperheparinemia is thought to be due to extensive irradiation and certain drugs such as the nitrogen mustards. This is in addition to the thrombopenia which may develop.

The present concept of the etiology of hemophilia does accept the fact that it is the fault of the platelets. Rather, in hemophilic blood there seems to be a deficiency of a certain plasma globulin. Whether this globulin acts as a neutralizer of an excess of an anti-thromboplastin present in hemophilic blood is not settled at the present time.

Afibrinogenemia rarely occurs, and is a congenital and usually a familial disease with the hemorrhagic tendency apparent and dangerous only secondary to trauma.

Capillary defects resulting in the purpuric states produce a variety of clinical entities. Primary hemorrhagic telangiectasia and hereditary pseudohemophilia are comparatively rare. The latter is interesting in that the rare phenomenon of an abnormal bleeding time without thrombocytopenic purpura occurs. This is apparently due to a primary capillary defect.

Vitamin C deficiency, mechanical factors as seen in hypertension and vascular congestion following cardiac decompensation, and generalized vascular endothelial sensitization result in secondary capillary defects. Henoch's and Schonlein's purpura are included in the last mentioned group; and investigation for specific allergies should always be carried out in these cases. The embolic petechiae seen in sepsis should also be included in the purpuras caused by secondary capillary defects.

To turn now to the thrombocytopenic purpuras, we find that these are due, in general, to two main causes. We will discuss the so-called secondary thrombocytopenic purpura first.

Secondary thrombocytopenic purpura is due to a defective bone marrow. Primary marrow aplasia may first present itself as a purpura. This is diagnosed by a marrow smear showing a beginning pancytopenia. Rarely a nutritional deficiency marrow hypoplasia has been described.

Toxic destruction or inhibition of the marrow may result from:

- (1) industrial chemical—i.e. benzol

- (2) therapeutic drugs—gold salts, phenobarbital, bismuth, iodine, etc.
- (3) physical agents such as X-ray or radioactivity
- (4) virus or bacterial infections (may be due to toxins, bacterial emboli, or endothelial damage).

Displacement thrombocytopenia is seen in the leukemia states, especially acute monocytic leukemia and acute lymphatic leukemia. It may also occur in conjunction with multiple myeloma, Hodgkin's disease, and metastatic carcinoma.

The therapy of these states caused by defective bone marrow, of course, depends on the cause. In the so-called primary marrow aplasias, the only therapy is multiple transfusions with fresh citrated blood. Toxic destruction or inhibition of the marrow is best treated by removing the offending agent and using any supportive measures that may be indicated while the marrow is recovering its function. As to the therapy of the displacement thrombocytopenias, it is obligatory to treat the underlying condition which is, as yet, in these states quite unsatisfactory. Supportive measures should be used as indicated by the condition of the patient.

The second cause of thrombocytopenic purpura is primary thrombocytopenic purpura or Werlhof's disease.

This particular type of purpura I wish to discuss at a little greater length. Idiopathic thrombocytopenic purpura is characterized by petechiae or ecchymoses in the skin, as well as by hemorrhage from the mucous membranes and into various tissues. It may be relatively benign and chronically recurring, or it may be a fulminating clinical picture.

Most frequently one gets a history of ready bleeding or epistaxis over a variable period of time. The illness may appear following an acute upper respiratory infection. The most common symptom is the purpuric lesions of the skin. These vary from minute red hemorrhages pinpoint in size to even suffusions and hematomas. The mucous membranes may be similarly affected, especially those in the nose and mouth. Bleeding of the gums is a frequent complaint.

The genito-urinary tract is often involved. Uterine bleeding beginning at the time expected for menstruation but being much

more profuse and prolonged may be the only symptom of the disease. Sometimes vaginal bleeding, beginning before puberty, may appear as the initial symptom. Hematuria is also not uncommon, but the blood comes usually from the renal pelvis, the bladder, or the urethra, and very rarely from the kidney parenchyma. Occasionally melana and, less frequently, hematemesis may occur, too. However, hemorrhage into the visera as in Henoch's purpura or hemoarthrosis as in hemophilia does not occur.

One's attention may be first directed to the condition with excessive bleeding following tooth extraction, tonsillectomy, or other operations or injuries. Subconjunctival and retinal hemorrhages may occur, but bleeding from the ear is rare.

The most serious complication is intracranial hemorrhage. These hemorrhages are usually multiple and vary in size from petechiae to large extravasations of blood.

Primary purpura hemorrhagica occurs most frequently in children and young adults. The disease occurs before the age of 21 in about 64% of cases. It may occur in infants and newborns. It may appear after the age of 40 in only a small percentage of cases. It occurs somewhat more frequently in females than males—as much as 2:1 in some series of cases.

As to the salient clinical and laboratory findings other than purpura and bleeding, the spleen is not enlarged in the vast majority of cases. The bleeding time is prolonged, clotting time is normal although the clot is non-retractile. The tourniquet test is positive. There is no disturbance in the RBC and WBC unless there has been hemorrhage or intercurrent infection. However, in severe hemorrhage, there may be marked anemia and leucocytosis with a leukemoid reaction, which often raises the question of whether the condition at hand is a leucopenic myelogenous leukemia. However, the characteristic finding in the peripheral blood is the thrombocytopenia.

The bone marrow has a normal appearance in idiopathic thrombocytopenic purpura with normal or increased numbers of megakaryocytes. These latter may be very large, and many young forms are sometimes found.

There is no known cause of this disease, but at the present time, there is a definite

feeling that so-called **hypersplenism** is the main factor involved. Whether the spleen sequesters large numbers of thrombocytes keeping them from the peripheral circulation or merely destroys the thrombocytes in excess numbers is not known. However, Doan feels that the former possibility is the most likely, since in his hands the adrenalin test will cause a temporary rise in the number of platelets in the circulating blood.

Once the diagnosis has been made and all other causes, as mentioned under secondary thrombocytopenic purpura, have been ruled out, most people feel that the therapy of choice is immediate splenectomy. It is not an infallible cure according to most statistics, but it offers symptomatic recovery in about 75% of cases in which there is only one episode of bleeding and approximately 50% of patients who have had several bleeding episodes.

At the time of surgery, careful search should be made for accessory spleens, and a liver biopsy and mesenteric node specimen should be removed. Usually there is an immediate rise in the thrombocyte count within a few hours after surgery. Doan feels that most cases which do not respond to splenectomy have a generalized hyperplasia of the reticulo-endothelial cell phagocytes in the liver and lymph nodes such that complete surgical extirpation is impossible. In these cases, conservative measures such as serial blood transfusions are the only therapy available.

An identical picture may be present in a patient with enlargement of the spleen due to such conditions as primary splenic Hodgkins granuloma, chronic leukemic involvement of the spleen, Gaucher's disease, etc. In such cases, many clinicians feel that emergency splenectomy should be performed exactly as in the so-called primary hypersplenism irrespective of the known presence of a disease process elsewhere in the body, since it may be a life-saving measure, even temporarily.

I realize that perhaps this seems to make the diagnosis and treatment of idiopathic thrombocytopenic purpura quite simple. However, in actual practice, it may not be so easy. One has no difficulty in determining that a thrombocytopenia is present, but sometimes the diagnosis of hypersplenism as

a cause is difficult. Dr. Schwartz, at Cook County Hospital, Chicago, Illinois, feels that there are some cases on an allergic basis which are difficult to prove as such, who do not respond to splenectomy, but have a more favorable prognosis on conservative therapy. He attempts to separate these by a process of counting the eosinophils in the marrow. If there are more than 50 eosinophils per thousand white blood cells, he feels that the allergic hypotheses is feasible, and advises an intensive study into this thesis before resorting to splenectomy.

One can procrastinate in the above fashion if one is dealing with a chronic recurring type of purpura, but in the fulminating case, one cannot delay too long since splenectomy may be a life-saving measure. The danger in waiting lies in the fact that cerebral hemorrhage into some other vital tissue may occur, or that the patient may become exsanguinated in spite of multiple fresh transfusions. If, for any reason, one feels it necessary to wait, multiple transfusions with fresh citrated blood are the only therapy.

To summarize briefly, the hemorrhagic diatheses according to current knowledge of blood coagulation may be divided into the **thrombocytopenic** and **non-thrombocytopenic** purpuras. The important diagnostic procedures in determining specific types are (1) a good history and physical examination; (2) a complete blood count including the number of blood platelets; (3) determination of bleeding time, clotting time, and capillary fragility; (4) study of blood and bone marrow smears; (5) in certain cases, prothrombin times and vitamin C levels. The treatment depends upon the type of purpura found. In most cases it consists of (1) transfusing with whole blood; (2) removing the offending agent, if any; or (3) supplying a specific deficiency, i.e., Vitamin K. In so-called idiopathic thrombocytopenic purpura, the treatment of choice is still splenectomy although this is not an infallible cure.

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Diverticula of the Small Intestine

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Diverticula of the small intestine are for the most part of congenital origin and make their appearance known in the older age group as a result of muscular failure of the wall of the bowel or possibly a neurogenic mechanism failure. Some diverticula may be acquired as a result of disease of the bowel or related structures. The diverticula of the small bowel differ from those of the colon because the bowel content of the small intestine is liquid whereas that of the colon is ordinarily solid. Diverticulitis of the small intestine is rare in contrast to that of the colon. The diverticula of the small intestine commonly occur on the concavity of the bowel; those of the colon appear on the convexity of the bowel. Pancreatic tissue will occur occasionally in small intestine diverticula, especially in the duodenum; many of the diverticula actually penetrate the pancreas. A Meckel's diverticulum is entirely different and occurs in various degrees as a remnant of the vitelline duct. The size of the diverticulum apparently has no relationship to the symptoms or results of treatment. The diverticula occur in the greatest majority in the second and third portion of the duodenum.

Review of 1190 consecutive examinations of the upper gastrointestinal tract reveals a total of 59 patients with roentgen evidence of small intestine diverticula, an incidence of approximately five per cent. Of these 59 patients, 29 had diverticula of the small intestine without other associated roentgenological findings. A follow-up study of these 29 patients was completed on sixteen. All of these patients had some sort of abdominal complaint. It is generally considered, however, that only about one-half of the small intestine diverticula cause symptoms. There is one suspected but not proven Meckel's diverticulum in the series reviewed, but not considered in the analysis. The roentgenological diagnosis of a Meckel's diverticulum

is extremely rare and this condition is unusually discovered at necropsy or at operation.

The chief complaints of the sixteen patients were quite consistent. Fourteen complained of epigastric distress and gas of varying severity. Hemorrhage, constipation, vomiting and lower abdominal pain varied considerably. The diverticula that shower barium retention either because of the dependent position or narrow neck usually had more consistent symptoms; localized tenderness as an inconstant finding. The age group was in the fifty to eighty years. The sexes are about equally divided in this pathological condition. None of these patients had surgical procedures for the diverticula. Excellent results were reported in one who had gall bladder management, including bile salts and gall bladder diet. Good results were reported in ten. These patients were on a bland diet, antispasmodics and laxatives. Good results were also reported in two who had no treatment. Fair results were reported in two who were given bile salts and a regulated diet. Poor results were obtained in three patients also on a gall bladder and regulated diet regime. In this series, the size of the diverticula had no relation to the response to medical management. A brief review of the literature reveals numerous reports of diverticula of the small intestine with essentially the same findings as noted in this series.

Meckel's diverticulum should be considered separately, and if symptomatic, is a surgical problem. The relationship of an inflamed or even perforated diverticulum to appendicitis is close and should be considered at the time of operation for appendicitis if the appendix appears normal. Occasionally gastric mucosa occurs in this type of diverticulum and may be the cause of intestinal bleeding; it is well to remember that hemorrhage occurs in over sixty per cent of Meckel's diverticula.

In the presence of epigastric distress during or after eating in patients who have a history of dyspepsia without other demonstrable roentgenological findings and who have demonstrable diverticula especially with retention of barium and localized tenderness, medical management consisting of a modified ulcer diet should be maintained and in most cases will relieve the symptoms. A small number of patients will not be relieved after a thorough trial by diet; and treatment in these instances is surgical extirpation of the lesion. The result of surgical removal of symptomatic diverticula of the few reported in the literature have been excellent in every instance. If a diverticulum is demonstrated roentgenologically, it frequently requires opening the lumen of the bowel to demonstrate the lesion surgically.

In summary, therefore, the occurrence of small intestine diverticula in this community is noted in approximately five per cent of patients examined by barium meal. Dyspepsia and epigastric distress is a common finding. The symptoms are relieved in most cases by medical management, but a small number of these patients unrelieved by medical management probably could be permanently relieved by surgical removal of the diverticulum.

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MINUTES OF COUNCIL MEETING

HURON, S. D.

SUNDAY, SEPT. 10, 1950

The Council of the South Dakota State Medical Association held its regular fall meeting at the Marvin Hughitt Hotel in Huron on Sunday, Sept. 10th. The meeting was called to order at 1 P. M. by the Chairman, Dr. G. E. Whitson. On roll-call the following Officers and Councilors were present: Drs. L. J. Pankow, D. A. Gregory, R. E. Jernstrom, R. G. Mayer, H. Russell Brown, J. D. Alway, Rodney Stoltz, G. E. Whitson, M. M. Morrissey, B. T. Lenz, F. D. Gillis, R. E. Van Denmark, A. P. Reding, A. A. Lampert, F. F. Pfister and W. H. Saxton; John C. Foster, Executive Secretary, Attorney Karl Goldsmith and Dr. D. H. Slaughter were also present. On motion the reading of the minutes of the previous session was dispensed with because they had been published in the August issue of the Journal.

A motion was made by Jernstrom, seconded by Morrissey, and carried that Dr. A. A. Lampert, Rapid City be elected to fill out the unexpired term of Dr. Jernstrom as Councilor of the Black Hills District. Dr. Slaughter made a report of the meeting of the Medical School Affairs Committee and the Medical School Endowment Fund Association held on Sept. 9th, outlining plans for fund-raising campaign. The report was discussed by Pankow and Saxton. A motion was made by Alway, seconded by Morrissey, and carried that the Council approve the work of the Committee and endorse the campaign.

The secretary read a letter received from Dr. James C. Sargent, Chairman of the Council on National Emergency Medical Service, A.M.A., requesting appointment of a Committee on Procurement and Assignment, and Pankow and Foster stated that they had also been contacted by Army officials regarding similar committee. After general discussion a motion was made by Gregory, seconded by Pfister, and carried that the President appoint such a committee. President Pankow appointed Dr. G. E. Van Demark, Sioux Falls; Dr. Lyle Hare, Spearfish; Dr. P. V. McCarthy, Aberdeen, and John C. Foster, Sioux Falls. The appointments were approved by acclamation with one dissenting vote, Dr. R. E.

Van Demark objecting to the appointment of G. E. Van Demark.

A discussion of proposed changes in the Basic Science Law followed. A motion was made by Jernstrom, seconded by Stoltz, and carried that the report of the sub-committee on Legislation that no changes be made in the Basic Science Law be accepted. Mr. Goldsmith made a report on legislation needed for medical research at the University of South Dakota Medical School, and after general discussion a motion was made by Pankow, seconded by Gregory, and carried that Mr. Goldsmith draw up bills for the proposed legislation. Dr. Pankow reported on Workmen's Compensation Law changes and recommended that unlimited medical and hospital coverage be proposed. A motion was made by Pankow, seconded by Pfister, and carried that Mr. Goldsmith draw up amendments to the law following the suggested proposals. The Legislative Sub-Committee recommended that the resolution to have all coroners be Doctors of Medicine be dropped and also recommended that no action be taken on the resolution to change the name of the South Dakota State Board of Medical and Osteopathic Examiners. Dr. Gregory moved the adoption of the above two recommendations, seconded by Dr. Saxton and carried. Dr. Morrissey moved that the Council support the legislation recommended by the Pathologists at the State Medical Convention in May, seconded by Gillis and carried. After a discussion a motion was made by Stoltz, seconded by Gregory and carried that the Council endorse the recommendations of the Sub-committee on Tuberculosis and inform the State Department of Health that the State Medical Association will stand behind them in achieving better laws for isolation of tuberculosis carriers.

"General discussion of proposed Annual Registration Fee for Physicians followed and it was decided that Councilors should contact their District Societies and get majority approval before proposing any legislation along these lines."

Executive Secretary Foster discussed the contract with the Veterans Administration for home-town care of veterans and Secretary Mayer read a letter from Dr. John E. Osborn asking for permission to speak before

a meeting of nurse anesthetists, which was granted. After considerable general discussion regarding appointment of members of the Grievance Committee President Pankow appointed the following as members of such committee - Drs. O. J. Mabee, Mitchell; F. S. Howe, Deadwood; J. L. Calene, Aberdeen; D. S. Baughman, Madison; T. F. Riggs, Pierre. Dr. Pankow stated that the term of office of each appointee would be decided at a later date and the appointments were given unanimous approval by the Council. A general discussion on Constitution and By-Laws for District Societies followed and it was decided that the executive office would send out mimeographed copies of the model of the A.M.A. and the Sioux Falls District Medical Society to each District Secretary. Announcement of the Conference on Health Councils to be held at Detroit Oct. 1st was made. Dr. Gregory moved that a resolution of condolence be sent to the Peabody family by the Secretary, since Dr. P. D. Peabody, Webster, past President of the S. D. State Medical Association, passed away recently. The motion was seconded by Stoltz and carried.

A motion was made by Alway, seconded by Gillis, and carried that the annual dues of members of the Association be suspended while they are serving actively in the Armed Forces. A letter regarding physicians serving in military service from Sioux Falls physicians who served during World War II was read by Secretary Foster but no action was taken because the Department of Defense had already set up a criterion for calling doctors into service. Dr. Pankow discussed the "Crusade for Freedom." A motion was made by Saxton, seconded by Alway, and carried that the President accept the appointment on this committee.

A letter from Dr. Elmer L. Henderson, President-Elect of the A.M.A., regarding the coming advertising campaign of the National Education Campaign suggesting tie-in advertising locally, as read by the Secretary and it was suggested that District Societies contact local pharmacists and insurance men urging such tie-in advertising. Dr. Pankow announced that South Dakota now has a chapter of the American Academy of General

(Continued on Page 309)

Current Trends in Antibiotic Therapy

by Major Edwin J. Pulaski, Medical Corps,
United States Army*

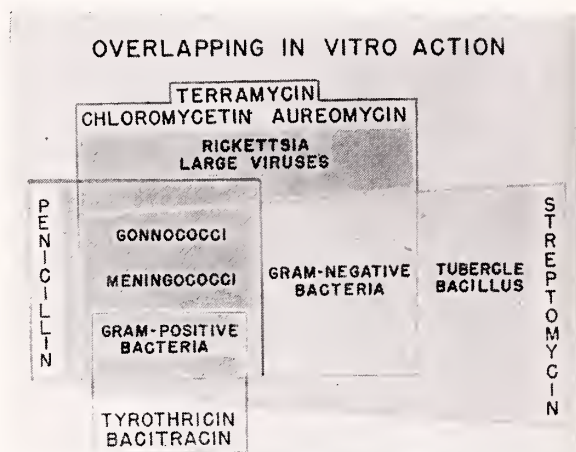
At the present time, the physician has several powerful antibiotics to choose from in the treatment of infectious disease. Following the discovery of tyrothricin and penicillin, the list of antibiotics of demonstrated clinical value was successively augmented by streptomycin, bacitracin, aureomycin, chloromycetin and now, terramycin. Neomycin, mycomycin, and prodigiosin, although they also show promise of becoming important, they have not yet reached the stage of extended clinical trial and commercial availability.

How should the clinician make his choice from among these potent allies? Obviously, knowledge of the principles which govern antibiotic action is necessary for their intelligent application. It is the purpose of this presentation to review these principles, and to outline the best current practice in the use of antibiotics against common infections.

CRITERIA OF SELECTION

Therapeutic effectiveness and low toxicity are clearly the first considerations in the selection of a drug. Other factors of importance are its pharmacological properties, whether significant numbers of bacteria can become resistant to it during treatment, and whether it is compatible and additive or antagonistic when it is given in combination with other therapeutic agents. Finally, ease of administration and cost to patient cannot be ignored. The latter consideration includes not only the cost of the drug per se, but also such concealed charges as supplemental drugs, sterile supplies used in its administration, laboratory control, and hospitalization of the patient.

Antibiotics are selective in action, and this selectivity, fortunately, does overlap to some extent. (Fig. 1) The first antibiotics, tyrothri-



cin and bacitracin, which was discovered later, are particularly effective in dealing with staphylococci, streptococci, clostridia and spirochetes. Penicillin is far more potent against gram-positive organisms; in addition, it is highly effective against gonococci and meningococci. Streptomycin is the first antibiotic to have therapeutic action against gram-negative bacteria and also against the tubercle bacillus. Like penicillin, it is active against gram-positive organisms, but to a lesser degree. Aureomycin, chloromycetin, and the recently introduced terramycin are of about the same qualitative order of effectiveness as streptomycin against the same bacterial spectrum. In addition, they are effective against many rickettsia and even some viruses. They differ from streptomycin in having only a feeble action on the tubercle bacillus. These three new antibiotics, like bacitracin, have therapeutic action against *Endamoeba histolytica*. Neomycin and mycomycin resemble streptomycin in that their most important action is on the tubercle bacillus.

Laboratory Controls

It is obvious, with the number of antibiotics now available, with more on the way, and with their overlapping action against many microbes, that ideal specific therapy of an infection is based, among other considerations,

* For presentation before the Annual Meeting of the South Dakota State Medical Association, Huron, South Dakota, Tuesday, May 23, 1950. From the Surgical Research Unit, Brooke General Hospital, Brooke Army Medical Center, Fort Sam Houston, Texas.

on pretreatment isolation of the causal organisms and on the results of culture sensitivity testing to these various agents. These precautions take time and require a laboratory equipped to give such service. Fortunately, precise clinical diagnosis is usually a dependable guide concerning the microbial flora likely to be found in a given case. The direct smear which is an office or hospital ward procedure, can yield invaluable aid in clinical diagnosis and in instituting correct antibiotic therapy. For example, streptococcal sore throat, Vincent's angina, diphtheria, anthrax, actinomycosis, tuberculosis and Welch's bacillus infection may be presumptively diagnosed by smear and clinical signs. On the other hand, exact laboratory data are always desirable in severe infections, in those not responding to treatment as expected, in all chronic infections, and in cases in which sensitization or intolerance requires change to an alternative drug. These data can provide useful information concerning the drug of choice, the possible alternative agents, and the dosage probably required.

While there are several methods for the determination of culture sensitivity, the agar plate-medicated disc method is the simplest. It consists in spacing over the inoculated surface of the agar plate discs containing measured amounts of each antibiotic being tested. Premedicated discs ready for use will soon be commercially available. Range of sensitivity is indicated by the clear halo of no growth around the disc; resistance is indicated by growth of the organisms up to the disc margin. In general, an antibiotic is likely to be effective clinically only if this *in vitro* test, which can usually be read after incubation over night, shows the organisms to be susceptible to a concentration of the drug which can be obtained in body fluids of the patient.

PHARMACOLOGY

The administration of antibiotics for their systemic effects makes them dependent on the bloodstream to reach the foci of infection. Diffusion of the antibiotic after absorption into the blood stream bears on selection of the drug of choice when several may have overlapping action against certain microbes. When penicillin, streptomycin and terramycin are used, it is important to remember that they do not diffuse readily into brain,

nerve and bone, and that diffusion into the cerebrospinal, synovial, pleural and pericardial fluids is slow and always in much lower concentration than in the blood. For this reason larger doses parenterally, may be necessary for treatment of infections involving these areas.

All the antibiotics are excreted in the active form to varying degrees by the urine, which makes each one a potential urinary antiseptic. Small amounts of penicillin and of streptomycin are excreted in the bile. Aureomycin, chloromycetin and terramycin are absorbed into the general circulation after oral administration and distributed in many body fluids and tissues. Aureomycin and chloromycetin diffuse readily into the cerebrospinal circulation in amounts considered therapeutically effective, while terramycin does not. When therapeutically effective blood serum levels are present, diffusion of all three antibiotics occurs into the pleural fluid and the bile. These orally administered antibiotics are excreted in high concentrations in the feces as well as in the urine.

In addition to differences in diffusion, dependence of antibiotics on the bloodstream for therapeutic levels limits their usefulness in another way. Obviously, where there is no blood supply, as in gangrene and neurosis, or a very poor supply, as in chronic varicose ulceration with fibrosis, chronic fibrotic tuberculosis or third degree thermal burns, little or no effect can be expected from their use. Finally, no amount of any of these drugs will remove an abscess or a necrotic slough, once they have appeared in the tissues, even though their contents may be sterile. Surgery must still play the principal role in their treatment. If this is not borne in mind, fatal disasters, such as rupture of a cerebral or mastoid abscess into the meninges or ventricles, may follow; peritoneal infection, though localized, may spread, and bone necrosis may still occur in an apparently controlled infection of the finger pulp.

ROUTES OF ADMINISTRATION

Aureomycin, chloromycetin and terramycin are fully active by mouth. Penicillin, on the other hand, must be given in much larger doses by mouth to get the same blood level as can be produced by injection, and the level achieved is not always reliable. The original objection to penicillin, that frequent intra-

muscular injections were needed, has been largely overcome by the introduction of slowly absorbed procaine penicillin preparations, which can be given once a day or even once every two days. When streptomycin is given by mouth, blood levels are negligible and inadequate for treating systemic infection, but the effect on the flora of the bowel is startling. The coliform organisms are over 99 per cent eliminated, at least temporarily. The same nearly complete bacteriological sterility is produced by aureomycin, terramycin and chloromycetin though they are absorbed in sufficient amounts to produce a therapeutic blood level.

In practice, aureomycin, chloromycetin and terramycin are given by mouth except when the oral route of administration is barred. Aureomycin is available commercially, and terramycin experimentally, for intravenous injection. Chloromycetin for parenteral administration is not available. Streptomycin is always given by intramuscular injection except when the aim is to sterilize the bowel or treat *Shigella* infection. Penicillin is usually injected, but in mild infections in adults or children, when an exact blood level is not important or when there is some other reason for avoiding injections, it may be given by mouth in 250,000 — or 500,000-unit tablet form at four to six hour intervals. The least desirable method of administering penicillin in therapeutic doses is by mouth because it is comparatively expensive and not always reliable. Experience indicates that two injections per day of 300,000 units of penicillin G aqueous produce clinical benefits in susceptible infections indistinguishable from those obtained by single daily injections of 300,000-unit procaine penicillin G preparations. Penicillin G for parenteral use and streptomycin are relatively inexpensive; procaine penicillin G preparations are somewhat more expensive. The cost of aureomycin, chloromycetin and terramycin is still high, but the trend is downward as production costs are absorbed by increased sales.

Tyrothricin must only be used as a topical agent. Bacitracin is used topically and by regional infiltration. Its parenteral administration, for systemic effects, is not advised, except as a life saving measure, because of the likelihood of renal damage. The use of penicillin as a topical agent should be

avoided, because of its sensitizing properties; bacitracin or tyrothricin, which are practically non-allergenic, should be substituted for it. Aureomycin and terramycin may also be used topically, in the form of ointments.

DOSAGES

It is beyond the scope of this presentation to discuss dosages of antibiotics except in a broad way. Details of treatment of specific disease entities are available in the usual sources of references. Penicillin G aqueous is used when it is desired to obtain high concentrations in the blood and body tissues, for injection with body fluids, for intratracheal and aerosol solutions, or when the patient is known to be sensitive to procaine. Procaine penicillin G suspensions (300,000 units), always used intramuscularly, provide detectable blood levels for 18 hours or longer, depending on the size of the dose and the suspending medium. Lower and longer blood levels are provided by use of the oil than by the aqueous suspension of procaine penicillin G.

Streptomycin is administered parenterally for its systemic effects. For acute infections and in courses of less than seven to ten days, 1 gm. intramuscularly in 2 cc. of sterile isotonic sodium chloride or 1 percent procaine solution is given every eight or twelve hours. For prolonged therapy the dosage should not exceed 20 mg. per kg. of body weight per day. Like penicillin, streptomycin may sensitize if it is applied topically, and this route of administration is therefore not recommended.

When aureomycin and terramycin are administered by mouth, a priming dose of 1 to 2 gm. is given, followed by 0.5 to 1 gm. by mouth every six, eight or twelve hours, depending on the severity of the infection. The dosage is continued until the infection is controlled. These two drugs also may be given by the intravenous route every twelve hours, in a dosage of 0.5 gm. dissolved in sodium glycinate diluent. Chloromycetin is given primarily by mouth, although when it is not practical to use this route, it may be given rectally. The initial dose is 60 mg. per kg. of body weight, followed by a dose of 1 gm. every six, eight or twelve hours, according to the severity of the infection. Treatment is continued for at least two days after the temperature is normal and the infection is under control.

Because of the powerful suppressive effects of aureomycin, chloromycetin and terramycin on fecal flora, vitamin supplements should be given when they are to be administered for more than seven days.

TOXIC REACTIONS

None of the aforementioned antibiotics is completely innocuous. Side effects, or toxic reactions, are of two general types, sensitization reactions, which can occur with any of the drugs, and dosage-related effects, the incidence and severity of which vary with the agent employed.

Sensitization reactions are relatively uncommon when the patient is given a drug for the first time, but with succeeding courses of treatment the probability of hyper-sensitization is increased in respect to both incidence and severity. Unfortunately, there is no way of predicting which patients will react to treatment in this manner, though a previous allergic history and previous administration of the drug are important clues. The present incidence of allergic reactions to aureomycin, chloromycetin and terramycin is low, which is not surprising, since the majority of patients probably are receiving treatment with them the first time. The incidence of clinical allergic reactions to penicillin is between 1 and 2 percent. The reaction rate increases with the magnitude of the dose (for which reason the rate is higher with oral than with parenterally administered drug), and the duration of therapy. It is always higher with topical application. Except for the risk of sensitivity, penicillin is relatively innocuous even when fantastically high dosages are given orally or intramuscularly. On the other hand, intrathecal injection may — like the direct cortical application of either penicillin or streptomycin — lead to convulsive phenomena of an unknown mechanism.

Toxic reactions to streptomycin are more frequent and considerably more hazardous than those attending the use of penicillin. Their incidence and severity increase in direct proportion to the size of the dose and the duration of administration. The incidence of skin eruptions of various kinds is less than 5 per cent. Far more important, however, is the fact that administration of 40 mg. per kg. of body weight (that is, about 3 gm.) to an adult daily results in vestibular dysfunction in virtually all patients at the end of three

weeks of treatment. Dosages of 20 mg. per kg. (1-1.5 gm.) daily or less cause the reaction in fewer than 10 per cent of the patients even though they may be given the drug for much longer periods of time. Obviously, whenever long courses of treatment are indicated, the dosage of streptomycin should be kept at or below 20 mg. per kg. (that is, 1 gm.) per day. Dihydrostreptomycin, **in the same dosage**, may be useful in the occasional case in which there is hypersensitivity to streptomycin; doses of 2.0 gm. or more daily over prolonged periods may produce loss of hearing during or even after treatment, which is rarely observed with streptomycin.

The most troublesome reactions reported for aureomycin, chloromycetin and terramycin are nausea and vomiting, sometimes associated with epigastric distress and with a burning feeling in the rectum. The use of aluminum hydroxide to alleviate these symptoms is contraindicated because it will interfere with absorption of the antibiotic into the circulation. The use of plain or chocolate milk instead of water to swallow the capsules will usually permit ingestion of these drugs without accompanying gastro-intestinal distress. One peculiar effect of the administration of these drugs, which results from the bacteriostatic action on the bacteria of the bowel, is the production of soft, bulky, frequent and almost odorless stools. Mucous membrane changes of varying degrees which may also complicate therapy, are attributed to destruction of intestinal bacteria and local alterations of bacterial flora. As a rule, patients who cannot tolerate aureomycin by mouth experience no unpleasant effects when it is given intravenously. None of these three drugs is acceptable in its present form for intramuscular administration. Occasional patients exhibit mild transient euphoria after large doses of chloromycetin, and some experience difficulty with the muscles of accommodation. Leukopenia is very infrequent and shows spontaneous reversal even in the face of continued administration of the drug.

DRUG RESISTANCE

Drug resistance of bacteria is another important consideration in the treatment of infection with antibiotics. It is most likely to occur with streptomycin because of a higher proportion of strains naturally resistant to this drug in a bacterial population. As a re-

sult, highly insensitive strains not infrequently occur early, particularly in heavy infections. Mutants possessing some degree of resistance tend to survive during penicillin

treatment, and through current, widespread, often indiscriminate usage, there may be spread of more and more of these strains from individual to individual. Resistance is

CURRENT INDICATIONS FOR ANTIMICROBIAL THERAPY*

ETIOLOGY & PRINCIPAL INFECTIONS

Actinomyces: ACTINOMYCOSIS
Bacillus anthracis: ANTHRAX
Borrelia species: VINCENT'S ANGINA, RELAPS. FEVER
Clostridia: GAS GANGRENE, TETANUS
Corynebacterium diphtheriae: DIPHTHERIA
Leptospira Sp.: WEIL'S DISEASE
Mycobacterium tuberculosis: T.B.
Pneumococcus: PNEUMONIA, EMPYEMA, MENINGITIS
Spirillum minus: RATBITE FEVER
Staphylococcus aureus: PYOGENIC INFECTIONS
Streptococcus, hemolytic: VARIOUS INFECTIONS
Streptococcus, non-hemolytic: S.B. ENDOCARD.
Streptococcus, anaerobic
Treponema pallidum: SYPHILIS
Treponema pertenue: YAWS

DRUG OF CHOICE

Penicillin with Sulfonamides
Penicillin G
Penicillin
Penicillin with antitoxins
Penicillin with antitoxins
Penicillin
Streptomycin
Penicillin
Penicillin
Penicillin; Aureomycin; Terramycin
Penicillin
Aureomycin; Terramycin
Penicillin
Penicillin G
Penicillin G

USEFUL ALTERNATIVE AGENTS

Aureomycin; Terramycin
Aureomycin
Aureomycin
Aureomycin; Terramycin
Streptomycin (?)
Aureomycin
Poro omino solicylic acid
Aureomycin; Sulfonamides; Terramycin
Aureomycin
Chloromycetin; Bocitracin
Aureomycin; Sulfonamides; Terramycin
Penicillin G; Streptomycin
Aureomycin (?)
Aureomycin; Chloromycetin (?)

ETIOLOGY & PRINCIPAL INFECTIONS

Aerobacter aerogenes: URINARY TRACT INFECTION
 BACTEREMIA
Bact. funduliformis: SEPTICEMIA
Brucella abortus, melitensis: BRUCELLOSIS
Escherichia coli: PYELITIS, BACTEREMIA, PERITONITIS
Hemophilus ducreyi: CHANCROID
Hemophilus influenzae: MENINGITIS
Hemophilus pertussis: WHOOPING COUGH
Klebsiella granulomatis: GRANULOMA INGUINALE
Klebsiella pneumoniae: FRIEDLANDER'S PNEUMONIA
Neisseria gonorrhoeae: GONORRHEA
Neisseria intracellularis: EPIDEMIC MENINGITIS
Pasteurella pestis: PLAGUE
Pasteurella tularensis: TULAREMIA
Pleuropneumonia-like organisms: NON-SPECIFIC
 URETHRITIS
Proteus vulgaris: URINARY INFECTIONS
Pseudomonas aeruginosa: URINARY INFECTION
Salmonella typhi: TYPHOID FEVER
Salmonella species: ENTERITIS
Shigella species: BACILLARY DYSENTERY

DRUG OF CHOICE

Aureomycin; Chloromycetin
Aureomycin
Aureomycin with Streptomycin
Chloromycetin; Aureomycin
Aureomycin; Chloromycetin
Aureomycin; Chloromycetin
Chloromycetin; Aureomycin
Aureomycin; Chloromycetin
Chloromycetin; Aureomycin
Penicillin
Sulfonamides with penicillin
Streptomycin
Streptomycin; Aureomycin
Aureomycin (?)
Chloromycetin
Chloromycetin; Streptomycin
Chloromycetin
 ?
Sulfonamides

USEFUL ALTERNATIVE AGENTS

Sulfonamides; Streptomycin
Terramycin
Terramycin; Chloromycetin
Streptomycin; Sulfonamides
Streptomycin
Sulfonamides with streptomycin
Terramycin
Streptomycin
Streptomycin
Sulfonamides; Aureomycin
Aureomycin

Streptomycin (?)
Streptomycin
Polymyxin
Aureomycin (?)
 ?
Streptomycin; Aureomycin; Chloromycetin

ETIOLOGY & PRINCIPAL INFECTIONS

Rickettsiae species: TYPHUS FEVER, ETC.
Herpes zoster
Viruses: LYMPHOGRANULOMA INGUINALE
 PRIMARY ATYPICAL PNEUMONIA
 PSITTACOSIS
Protozoa: AMOEBIC COLITIS

DRUG OF CHOICE

Aureomycin; Chloromycetin; Terramycin
Aureomycin
Aureomycin; Chloromycetin
Aureomycin Chloromycetin
Aureomycin
Aureomycin

USEFUL ALTERNATIVE AGENTS

Chloromycetin
Sulfonamides; Terramycin (?)
Terramycin
Chloromycetin (?)
Bocitracin; Terramycin (?)

not yet of practical importance with aureomycin, chloromycetin and terramycin.

In order to prevent the multiplication of these insensitive variants, some other antibacterial substance, which acts on a different enzyme system of the microbe, should be given simultaneously with streptomycin. With combined therapy, the chance is very small that a mutant will arise which is insensitive to two or more such bacterial substances. In addition, combined therapy carries with it possible synergistic effects from the mixture of drugs, a decided advantage.

The following indications for combined therapy are suggested:

1. Fulminating infections.
2. Mixed or polybacterial infections.
3. Infection by intracellular organisms.
4. Acute infections in which an optimal response is not obtained with maximal doses of a single agent after 48 hours.
5. Infections treated by antibiotics such as streptomycin, in which drug resistance can develop.
6. Infections in body fluids or tissues in which therapeutic levels are difficult to achieve with a single antibiotic. Meningitis, empyema, subacute bacterial endocarditis, and chronic infections are examples.

It should be emphasized that a combination of drugs, with full doses of each drug, should be used on these indications from the start, and not after one or two failures. This is especially important in bacterial infections, in which resistance to drugs is known to arise readily.

THE SELECTION OF ANTIBIOTICS IN SPECIAL DISEASES

The accompanying table (Table 1) lists the indications for antibiotics according to "drug of choice" and "useful alternative agents." This table at best represents only current practice. For some of the recommendations there is still little detailed evidence, while the newer antibiotics are still untried in a great many of the less common infections. In some diseases the selection is strictly limited; for example, chloromycetin for typhoid and streptomycin for tuberculosis are the only effective drugs now available against these infections. In some diseases there is little to choose between two or more drugs. Thus aureomycin, chloromycetin and terramycin

are all useful for rickettsial infection. The real difficulty arises with every-day coccal and gram-negative infections. Penicillin is still the drug of choice for staphylococcal, streptococcal and pneumococcal infections, and for the treatment of generalized spirochetal infection. Aureomycin, chloromycetin and terramycin may be successful against penicillin-resistant organisms or in patients with an idiosyncrasy to penicillin. Aureomycin is finding increasing favor in the treatment of neurosyphilis and coccal meningitis because of its ability to penetrate the blood-brain barrier. Bacitracin is being used extensively for coccal infections which can be reached by topical application because it does not cause hypersensitivity. Coliform infection in the urinary tract and elsewhere is now preferentially treated with aureomycin, chloromycetin or terramycin because of the readiness with which these organisms become drug fast to streptomycin. *Proteus* and *pyocyaneus* infection is likely to be susceptible only to chloromycetin and streptomycin. *Brucella* infection is still a problem, and it may be that a combination of aureomycin, chloromycetin and terramycin with each other, or the use of one or another of these agents singly with dihydrostreptomycin, may be the best solution. None of the usually available drugs is uniformly curative for *Salmonella* infection and typhoid carrier states. Herpes zoster seems to respond best to aureomycin; chloromycetin and terramycin are less effective. All three drugs appear equally useful in the treatment of infections caused by large viruses of the lymphogranuloma-psittacosis groups. None of the antibiotics is useful in the treatment of the common cold. Antibiotic usage for prophylactic purposes, while popular, is not universally agreed upon as being effective.

THERAPEUTIC FAILURE

No discussion of antibiotic treatment is complete without some mention of why these drugs sometimes fail to control infection. The following are common causes of therapeutic failures:

1. The treatment of infection not susceptible to the antibiotic selected.
2. Infection by naturally resistant strains occurring in species ordinarily within the antibacterial spectrum of the drug, (e. g.

(Continued on Page 320)

The Care of Hand Injuries*

VII

TRAUMATIC AMPUTATIONS

I Protection of the Hand (Abstract of Article I)

The first-aid care of wounds of the hand is directed fundamentally at protection. It should provide protection from infection, from added injury, and from future disability and deformity. The best first-aid management consists in the application of a sterile protective dressing, a firm compression bandage and immobilization by splinting in the position of function.† No attempt should be made to examine, cleanse, or treat the wound until operating room facilities are available.

II Requirements of Early Definitive Treatment (Abstract of Article II)

Early definitive care requires thorough evaluation of the injury with respect to its cause, time of occurrence, status as regards infection, nature of first-aid treatment and appraisal of structural damage. For undertaking the definitive treatment the conditions required are a well-equipped operating room, good lighting, adequate instruments, sufficient assistance, complete anesthesia and a bloodless field. Treatment itself consists of aseptic cleansing of the wound, removal of devitalized tissue and foreign material (exercising strict conservation of all viable tissue,) complete hemostasis, the repair of injured structures, protecting nerves, bones and tendons and providing maximum skin coverage, and the application of firm protective dressing to maintain the optimum position. After-treatment consists of protection, rest and elevation during healing and

early restoration of function by directed active motion.

III Surface Injuries (Previously circulated)

IV Lacerated Wounds (Previously circulated)

V Fractures and Dislocations (Previously circulated)

VI Open Fractures (Previously circulated)

VII Traumatic Amputations

The loss of part of the hand by injury may result from cutting, tearing or crushing wounds. Such injuries almost invariably produce one or more open fractures. There are often associated injuries of the remaining parts of the hand. Such injuries require appropriate treatment, as outlined in previous articles.

The purposes of early treatment of traumatic amputations are:

- (1) To relieve pain, control hemorrhage and combat shock.
- (2) To conserve all viable tissue possible.
- (3) To prevent or control infection.
- (4) To secure the maximum restoration of damaged structures.
- (5) To secure healing at the earliest possible time.
- (6) To restore the injured hand to maximum usefulness.

These objectives are sought by:

A. First-aid treatment

1. All tissues not actually severed from the hand should be retained. Without attempt at cleansing or the application of any antiseptic, a voluminous sterile dressing is applied and bandaged with firm, even pressure. The hand is immobilized by splinting in the position of function and kept elevated.
2. The pressure dressing will usually suffice to control the loss of blood. If it does not and free hemorrhage persists, the use of a tourniquet, properly applied, may be neces-

*Note: This is the seventh of a series of articles on "The Care of Hand Injuries." This material is prepared by the American Society for Surgery of the Hand and is distributed by the Committee on Trauma, American College of Surgeons, through its Regional Committees.

† Position of function or position of grasp: wrist hyperextended in cock-up position; fingers in mid-flexion and separated; thumb adducted, slightly forward from hand and slightly flexed.

sary. This should not be left in place more than forty-five minutes.

3. Appropriate measures should be taken to control pain and combat shock.

Proper conditions for definitive treatment should be sought at the earliest possible time. (See Article II)

B. Definitive treatment

Under operating room conditions and following x-ray study of the hand with first-aid dressing in place, the following measures of definitive treatment are appropriate:

1. Cleansing of the injured area and evaluation of the injury under pneumatic tourniquet hemostasis if necessary. (See Article IV Lacerated Wounds)
2. Arrest of hemorrhage by ligation of injured vessels.
3. Thorough but gentle removal of foreign substance and excision of devitalized tissue, sparing all that may live. (See Articles IV Lacerated)
4. Repair, as far as practicable, of damaged structures and reduction of fractures and dislocations. This repair should aim particularly at the protective covering of bones, tendons and nerves. Maximum skin coverage should be provided at once by
 - a. Utilization of local skin,
 - b. Free split-thickness grafts, or
 - c. Employment of an abdominal or thoracic pedicle graft.

Where skin loss is extensive, or in stripping or denuding amputations of digits (especially the thumb) leaving bone exposed, the application of a pedicled skin graft is desirable.

Local skin should not be employed if the preparation of flaps requires further amputation or sacrifice of living bone. Thus, the stump of an amputated should be left at full length and be covered by appropriate graft, either immediate or delayed. Sacrifice of

finger length by formal re-amputation is to be condemned.

Partially amputated parts of digits should be retained and lightly sutured in place with skin stitches only. Many will survive and may subsequently be restored to usefulness.

5. Retention of reduced incidental fractures or dislocations by appropriate splinting or fixation. (See Articles V Fractures and Dislocations and VI Open Fractures)
 6. Application of firm pressure dressing, the hand (except when fixed to the body for grafting) being splinted in the position of function.
 7. Administration of tetanus toxoid or antitoxin and antibiotic drugs.
- #### C. Subsequent care

1. Dressings.

Unless evidences of infection develop, the dressing should be left in place for a sufficient time to permit healing of initially closed wounds or the firm taking of grafts (7 to 10). Coincidental fractures require additional periods of immobilization to assure union. (See Articles V Fractures and Dislocations and VI Open Fractures)

2. Surface healing.

If skin coverage has not been completed at the time of initial definitive treatment, or if grafting has failed, preparations should be made to place or replace skin grafts at the first post-operative dressing. Denuded areas should be given skin coverage at the earliest possible time.

3. Restoration of form and function.

When healing is complete a program should be developed and prosecuted for:

- a. Restoration of function by exercise and occupational retraining.
- b. Reconstructive surgery to render the hand remnant as useful as possible, or
- c. Preparing the stump for prosthesis.

X-ray Differential Diagnosis of Malignancy in the Gastrointestinal Tract*

G. M. Tice, M.D.
Kansas City, Kansas

The roentgenologist is called for consultation in cases in which the presenting symptoms might suggest cancer, and in which x-ray examination can be expected to make or at least suggest the correct diagnosis. The symptoms and signs of blood loss, obstruction in the gastrointestinal tract, pain, or a palpable undiagnosed mass, offer sufficient evidence of the possibility of cancer to justify investigation. In addition one might add anorexia, weight loss, gas, change in bowel habits, or the mental hazard, perhaps unjustified, or cancerphobia, as an indication for investigation of the gastrointestinal tract. Each individual sign or symptom calls for all the skill possible by the radiologist in determining, if possible, the presence or absence of malignancy.

In the esophagus, stricture, foreign body, achlasia, diverticulum, and carcinoma may be the cause of obstruction. Bleeding may be due to varices, ulcer, or carcinoma.

It is in the stomach that the almost insurmountable problem of early diagnosis of cancer lies. Approximately 180,000 deaths in the United States annually are due to cancer, of which one third are due to gastric carcinoma. Despite the tremendous interest of the public in the subject of cancer diagnosis and cure; despite post graduate programs for physicians; and despite financial drives and educational programs by various cancer organizations, we are not diagnosing cancer of the stomach early enough to produce a greater salvage than was produced twenty years ago. Pack and Livingston¹ report gastric cancer cure in unselected cases of 2%. Walters, Gray, and Priestly² of Mayo Clinic report 6% five year cures.

Much has been said about early diagnosis. We do not know the solution to the problem except that every stomach in every individual

at the age of forty should be examined every six months by x-ray or gastroscopy. This idea, of course, is impractical and would not be followed by the mass of our population, even if an educational program could be adequately financed and propagated. How many doctors or their near relatives have had gastric examinations by either of the above methods once a year, or even once in a lifetime? It is a natural tendency to defer what is not a pressing problem in a busy work day. Mass surveys for gastric cancer have been made. St. John, Swenson and Harvey³ did fluoroscopic examinations on the stomachs of 2,413 patients over the age of 50. They found two gastric cancers and one lympho-sarcoma. Dailey and Miller⁴ examined 500 normal patients who had no gastric complaints. These individuals were over 45 years old. They found a benign gastric ulcer, a polyp, and change in the antrum of the stomach that they reported as gastritis. Certainly a fluoroscopic examination with spot films is an approach to the early diagnosis of stomach cancers. We have had no experience with photofluorographic survey of apparently normal stomachs. A few cases of gastric cancer have been found by this method. It seems to me that without benefit of fluoroscopy many more may have been missed in the series studied, leaving individuals with a false sense of security.

The answer to mass survey as far as fluoroscopy is concerned is that there are not enough radiologists, and not enough x-ray apparatus to even initiate a program that would cover the entire population. We would have to weigh the good that was done by the discovery of three malignancies in 2,400 individuals as reported against the harm done to the fluoroscopists, in doing this many examinations by exposure to radiation. We would also want to know that the three cases diagnosed were early cases that would stand

* Presented at the South Dakota State Medical Association Annual Meeting, May 21-23, 1950, Huron, S. D.

a good chance of being saved by having an early diagnosis. Some of us still are inclined to think of economics, even in these days of free spending. I know that if one found three cases in every 2,400 examinations of normal stomachs, particularly if these lives could be saved by early diagnosis, that the financial aspect should not be considered. We can foresee the possibility of a tremendous financial obligation on the part of some agency if routine stomach examinations by photo-fluorographic means should become popular. I doubt if the yield would justify the expense.

The roentgenologist in studying the cases where possibility of cancer is considered may find a case in which he cannot be sure of his diagnosis. He should recommend surgery in this case, if after repeated examinations he decides an organic lesion is present. It is almost an axiom that the easier it is to diagnose cancer of the stomach the less likely is the operation to be a success.

There are certain lesions and conditions that require a high degree of suspicion of malignancy. Polyps are not commonly seen, and in our experience, are believed to be benign, even in the older individual. The hazards of an operation must be weighed against the possibility of a polyp being a benign lesion when seen in an older individual. Kaplan and Rigger⁵ consider polyps likely to be malignant if seen in association with pernicious anemia. These same authors show that gastric cancer was present in 12.3% of patients dying of pernicious anemia.

The relationship of gastric ulcer to cancer is much debated. A few years ago prominent surgeons, radiologists, and pathologists felt that an ulcer 2.5 cm. in diameter was malignant. This cannot be accepted now as a statement of fact. We have seen large gastric ulcers operated on that were benign. We also have seen small ones that proved to be malignant. There are certain roentgen signs from which we try to decide whether an ulcer is benign or malignant. These signs are not very dependable. It has been said that 10% of gastric ulcers which appear benign by usual diagnostic procedures show evidence of cancer on removal. The surgeons⁶ have here a practical argument for surgical treatment of all gastric ulcers when they weigh this 10% possibility of incorrect diagnosis by all means

available against less than 5% mortality in treatment of gastric ulcer surgically. It seems practical to treat the gastric ulcer in the younger individual associated with hyper-acidity by medical management for a period. If at the end of two weeks there is no evidence of beginning healing, surgery is to be seriously considered.

In addition to ulcer the radiologist must identify varices in the cardia, bezoars, benign tumors other than polyps, and a pathological process that is currently attracting attention, prolapse of gastric mucosa into the duodenum. Melamed⁷ reported in his series of 50 consecutive cases that of all organic disorders in the upper gastrointestinal tract, duodenal ulcer was the only condition found more frequently than herniated gastric mucosa. This is a larger incidence of this process than we see. Perhaps we are not as keenly alert to the possibility of this pathology as are some others. Symptoms may be discomfort, bleeding, obstruction and in one of our cases, a palpable mass was found.

Primary malignancy of the duodenum hardly deserves consideration, but cannot be completely ignored. Ulceration beyond the pyloric ring in the first portion of the duodenum is usually correctly diagnosed as a benign ulcer. Beyond this level, however, one must be on the alert, particularly in the jaundiced individual for malignant invasion of the duodenum from carcinoma of the biliary tract. This is manifested by a disturbance in the normal mucosal pattern of the duodenum.

Tumors of the small gut may be malignant adenocarcinoma constituting 80% of the cases found. A few benign tumors may be encountered, a common example of which is carcinoid tumor of the appendix, or the small gut. Neither the benign nor malignant tumor is common. Where obstruction of obscure bleeding is encountered we must study the small bowel pattern with a small bowel enema or with serial films and fluoroscopic examination following the barium through into the cecum. Inflammatory processes such as regional ileitis and tuberculosis must be differentiated from possible malignancy.

In the colon we expect to share the responsibility of diagnosis with the sigmoidoscopist. The radiologist may miss a small lesion in the rectum. This area is subject to direct visual-

ization and should be so studied before the patient is sent to the radiologist. The "hidden areas" of the colon must be studied by the fluoroscopist. The patient must be turned from side to side while barium flows into the colon. Every inch of the colon must be thoroughly examined. The colon must be devoid of extraneous material that might be misinterpreted as a pathological filling defect. An ounce of castor oil that night before usually accomplishes this cleansing process. In our experience we almost invariably follow the regular barium enema with a mucosal pattern film, or a double contrast enema as advocated by Weber⁸ years ago. Both procedures may be used. The roentgenologic demonstration of polypoid lesions, single or multiple usually depends on the double contrast film. The differential diagnosis between a benign and malignant lesion in the colon is usually possible by an experienced examiner. The fact should be emphasized that wherever direct visualization can be used to arrive at a diagnosis, dependence must not be placed only on the roentgen findings. We defer to the pathologist in the accuracy of the diagnosis, particularly in the gastrointestinal tract. If a lesion can be seen and biopsied it can be more accurately diagnosed than if an abnormal x-ray shadow has been demonstrated.

In some cases where there is a high degree of suspicion of a pathological process the radiologist is justified in repeating the examination again and again if he does not demonstrate pathology the first time.

Differential diagnosis in the colon will include, diverticulitis, ulcerative colitis, polyps, carcinoid tumor that may intussuscept into the cecum and various inflammatory processes such as tuberculosis, actinomycosis or peri appendiceal abscess.

CONCLUSION

A high degree of accuracy may be obtained in the study of the intestinal tract by roentgen ray if the examiner has a knowledge of the pathological processes that may be encountered. If pathology is not thought of it is not diagnosed. In some cases, even after several examinations, one must be satisfied that a lesion is present, the identification of which is not possible. If malignancy is under consideration even though it cannot be positively diagnosed by the radiologist, exploration

must be done. It is no disgrace or reflection on the examiner if he is asked to repeat an examination. A high degree of suspicion is the best ally we have in our fight to diagnose early cancer.

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(Continued from Page 298)

Practice and invited those interested to apply for membership.

Mr. Foster, on behalf of the Rosebud District Medical Society and the City of Burke, nominated Dr. R. J. Quinn, Burke, as South Dakota's General Practitioner of the Year. A motion was made by Gillis, seconded by Gregory, and carried that the nomination be adopted. A motion was made by Van Demark, seconded by Gregory, and carried that expenses up to \$50.00 be allowed for preparation of data for presentation of the General practitioner of the Year.

Mr. Foster read a letter from the National Association Board of Pharmacy. A motion was made by Gregory, seconded by Saxton, and carried that the request be tabled. Dr. Pankow discussed consolidation of districts and reports of district secretaries. General discussion followed but no action was taken. Mr. Foster led a discussion on Public Relations. On motion the meeting adjourned at 4:00 P. M.

R. G. Mayer, M.D.,
Secretary.

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CUFF NOTES

The Surgeon Anesthetist Relationship

In the past the surgeon has adopted the attitude that he alone assumes the responsibility for the patient, and that every phase of the operative procedure, including the administration of the anesthetic, must be under his direction.

A change in the character of the anesthesiologist's functions has occurred, and with this new development the anesthesiologist assumes heightened responsibilities. He is no longer a technician, but a specialist and a consultant.

The evolution of modern medicine has produced a division of effort in the profession, thus it is unreasonable that one individual should be responsible for all phases of medical care.

In the field of medicine, there is no better example of cooperation than in surgery and anesthesia. The anesthesiologist has assumed a most important role in the drama of the operating room, yet the importance of his part is not recognized fully.

P. H. T. Thorlakson, University of Manitoba, Winnipeg, Canada. *M.A.J.* November, 1946.

Exsanguinating Hemorrhage in Peptic Ulcer

Studies indicate that almost all deaths from a hemorrhaging peptic ulcer are in patients over 45 and usually over 50 years of age. Determination of the amount of hemorrhage in these cases is important but difficult.

Certain simple criteria are suggested as aids in diagnosing potentially exsanguinating peptic ulcer. The patient must be 45 years old or more. Presence of peptic ulcer must be established. The rate and amount of blood loss must be excessive. Obvious shock indicates an acute blood loss of 2000 cc. Incipient shock may be brought out in a supine patient by raising him 75 degrees. An increase of more than 50 beats in the pulse rate or vascular collapse and syncope indicates a loss of 1,000 to 1,500 cc. of blood. Elevation of the blood urea nitrogen to more than 50 percent above normal in patients without kidney disease indicates a blood loss of 800 cc. or more. Persistence of severe bleeding in spite of medical treatment indicates surgery.

D. Metheny and D. M. Green, Univ. of Washington School of Med., West J. Surg. Fed. 1947.

Edited by Don H. Manning, M.D.
Sioux Falls, S. D.

ATTENTION

Reserve Officers and Draftees:

When going on active duty in the armed services, please notify the Association in Sioux Falls so you will be maintained as a military member until such time as you are released from active duty.

Journal Notes:

The AMA will meet in Atlantic City at its Annual Session from June 11th to 15th. The Hotel New Yorker is planning All Expense Tours of New York the 8th, 9th and 10th or the weekend after the meeting which will be the 15th, 16th and 17th.

Any doctors interested in a visit to New York and a tour of the city may contact Winston D. Ryan, Asst Manager Sales, Hotel New Yorker, 34th Street at 8th Avenue, New York 1, New York.

* * *

MADISON-BROOKINGS DISTRICT

The Madison-Brookings District Medical Society met August 10th at Volga. Dr. W. O. Reed of the University of South Dakota spoke on the "Physiology of the Adrenal Cortex." Dr. Saul Freifeld was accepted as a transfer member.

* * *

Sioux Falls District Meets — Sponsors News Supplement.

The Sioux Falls District Medical Society met October 3rd at the Veteran's Administration in Sioux Falls. At the meeting, the group endorsed a plan to purchase a supplement to the Sioux Falls Argus-Leader which would run 16 pages or more. The group arranged to purchase a page of advertising and approved the plan for other organizations to advertise in conjunction with them. Dr. H. Worley Kendell, Head of the Dept. of Physical Medicine, University of Illinois, School of Medicine spoke on "The Value of Electromyography in Physical Diagnosis."

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PRESIDENT'S PAGE

October Message

Are we Doctors of Medicine together, or are we Specialists and General Practitioners, divided against each other?

An article appeared in a recent issue of Consumers Reports which was a commenting review of an article in a National Monthly Magazine, written by a Surgeon. Essentially the author implied that about 90% of all General Practitioners were incompetent and or careless in their treatment of the sick, and inferred that Specialists were different. There was suggested as a cure that only Special-

ists should be allowed to hold staff appointments in General Hospitals. He openly stated that the only reason immediate action was not started by the Specialists was that with compulsory health legislation an issue, it was poor time to antagonize General Practitioners.

A General Practitioner has been defined as a Doctor who practices in two or more specialties. I state that the percentage of General Men are practicing good medicine is as high or higher than for men in any specialty. We general men have always considered the Specialist an ally, not a competitor or a physician unable to cope with the medical problems of the whole body. Unless provoked into a different feeling, that will continue to be our attitude. We do not wish to divide the profession into Doctors versus Specialists, but if that issue ever comes out into the open at the behest of the specialists in this State, at least, let this be a solemn warning of what is most apt to happen. Do not forget that we far outnumber Specialists, and if there comes any question of hospital or other preferment, the Specialists may find themselves on the outside looking in. They may well be treated as they are in some countries, allowed to practice in a general hospital only at the expressed invitation of the General Practitioner in charge of the case, and then only as a courtesy.

General Practitioners do not wish to have this split within our ranks occur. The specialty boards should note that there is a rapidly growing Academy of General Practice which is assuming gigantic proportions. It is cementing General Physicians into a unified force, and compelling them to keep up to date by meetings and by refresher courses. We much prefer to direct this force toward the benefit of the entire Profession and the entire populace, than to direct it toward chastisement of any or all specialists. We prefer to work together for the common good and the welfare of all patients.

The writer of the article that has caused this furor claims to be a surgeon in the East, and a part time teacher in a Medical School. His article is quoted by an organization whose Board of Directors reads like a directory of a communistic forum in a Ghetto. He may stand quite alone in his ideas of creating a rift between members of the profession, but the ideas he advances should be decried by all Physicians who have unselfish devotion to the care of the sick as a foundation for their life work.

So far as I am aware, there is feeling of disunity among the Doctors of South Dakota, and it seems unlikely that such a situation could ever arise in our State. Nor should there be a need for a preacher to blast against sin to those people who come to Church. So this warning should be taken by our physicians as a message to carry to those that need it in other parts of the Nations, and it is hoped that perhaps some exchange reader may accept a warning of what might well happen if any one section of practitioners try to too openly assert their superiority.

One way for us to show our solidarity of opinion, right now, is to send in that deductible contribution to the Medical School Endowment Fund Corporation to Mr. John Foster, 300 First National Bank Building, in Sioux Falls. How about that \$1.00 a year for each year we have been in practice, and how about doing it every year? We have decided as a State Association that we are united for a top rate Medical School; let's give more than empty lip service to our medical school.

L. J. Pankow, M.D.

EDITORIAL PAGE

MILITARY SERVICE FOR PHYSICIANS

There have been hundreds of rumors, reports and authentic stories circulated on the number of doctors that would be called for service and who would go. The South Dakota Medical Association in an effort to cooperate with Selective Service and the Department of Defense has set up a Procurement and Assignment Committee of five men; one of whom is the President of the Association, one the Executive Secretary and three others appointed by the President on approval of the Council. This committee has already contacted the Fifth Army, Ninth Naval District and Selective Service to determine the needs in the near future as far as South Dakota is concerned.

ARMY RESERVE

Col. E. W. Billick, Surgeon of the Fifth Army has forwarded the deferment criteria for Reserve army officers. This has already been published in the newspapers but can stand repeating in the Journal.

The Department of the Army has stated that officers in the following categories will not be called presently:

- a. Reserve medical officers who have not completed at least one year of intern training.
- b. Reserve medical officers who are senior residents prior to completion of the current years training.
- c. Reserve medical officers now pursuing a full-time post graduate course of instruction in medicine, or in sciences allied medicine at a college, university or somolar institution of higher learning, until completion of the current academic year of such training.
- d. Reserve medical officers whose activity in teaching, research, and allied endeavors is considered necessary to the maintenance of the national health, safety, or interest.
- e. Reserve medical officers residing in communities, the health of which would be unduly jeopardized if such of-

ficers were to be ordered to extended active duty.

In a conversation with the Executive office of the South Dakota Military District, it was learned that as of September 20th, no calls for Reserve medical officers had yet been made in this state.

NAVAL RESERVE

The Secretary of the Procurement and Assignment Committee talked to Naval Capt. Fugura at the headquarters of the Ninth Naval District in Chicago and was informed that currently the Navy does not intend to call any physicians other than those serving with regular organized naval reserve units. Apparently because of only slight losses to naval forces, such reserve call will not be contemplated until more necessary.

SELECTIVE SERVICE

The Doctor Draft Law enacted by Congress authorizes the President to require special registration of and to make special induction calls for male physicians, and other specialists. This law sets the age limit at 50 and all who are inducted must serve at least 21 months if acceptable to military.

The priority on calls under Selective Service are as follows:

- a. Those deferred from military duty during World War II, including ASTP and V-12 doctors, to complete their professional training and who subsequently had less than 90 days active military duty or Public Health Service duty.
- b. Those in the foregoing category who had more than 90 days but less than 21 months of active military or Public Health Service duty.
- c. Others within the age limitation who did not have active military or Public Health Service duty subsequent to September 16, 1940.
- d. Those not in categories (a) and (b) who has some military or Public Health Service duty subsequent to September 16, 1940, under a procedure whereby

those who served the least number of months would be called ahead of those who served a greater period of time.

The Selective Service offices as of the date of this printing, October 10th, had received no quota for a draft of physicians. Individuals who wish further information can keep posted by contacting the Executive office. P.S. Any Reserve Medical Officer called to active duty will receive the \$100.00 per month bonus whether he returns to duty voluntarily or involuntarily. If a doctor is called up by way of draft he does not receive the \$100.00 per month bonus.

GULLIBLE'S TRAVELS

August 29

Drove with my wife to Madison where I spoke to the Kiwanis Club on the techniques used by socializers in attempting to sell their schemes.

Dr. D. S. Baughman made the arrangements and introduced me to the group.

September 8

Drove with Dr. Pankow to Webster to attend the funeral of Dr. P. D. Peabody who is a past-president of the state Medical Association.

September 9

Drove to Huron with Dr. Pankow to meet with the members of the Medical School Endowment Association. Returned to Sioux Falls to attend the wedding of Dorothy Anderson, our assistant editor. She now becomes Mrs. Douglas Weck.

September 10

Returned to Huron for the Council meeting which is reported elsewhere in the Journal.

September 12

Spoke to the Sertoma Club in Sioux Falls on medical cooperatives. Dr. Don Manning made the arrangements and the introductions.

Left at 4:00 P.M. to speak to the Parkston Lions Club where Dr. Wm. Rieb did the honors.

September 13

Drove to Wagner to speak to the local Rotary Club on "Compulsory Health Insurance." Dr. R. W. Honke made the arrangements and also took me through the new hospital building.

September 21

Drove to Aberdeen to make plans for the Annual Meeting, the dates of which have been tentatively set for June 3 thru 6. Had lunch with Dr. R. G. Mayer and discussed plans. Received excellent cooperation from every one.

September 23

Spoke to the Mitchell Life Underwriters Association at the Steak House and held a nice discussion with group. Drs. B. R. Skogmo and C. S. Moran were there to give spiritual uplift to the affair.

September 30

Spoke to the Kiwanis Club of Sioux Falls on the usual subject. Dr. C. S. Larson made the arrangements and Ron Iler acted as program chairman.

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P. D. Peabody, M.D.
(1878-1950)

President

South Dakota State Medical Association 1930

Dr. P. D. Peabody, Webster, president of the South Dakota State Medical Association in 1930 passed away at his home on September 6.

Dr. Peabody is remembered by his many friends in the profession as a leader in Medical Association activities which culminated in his accepting the presidency of the Association in 1930.

Percy D. Peabody was born at Elroy, Wisconsin on October 20, 1878 and moved with his family to Webster in 1881. In 1894, he graduated from high school and attended Valparaiso University in Indiana for a period of one year. The following year he passed the South Dakota State Board of Pharmacy and for two more years he operated his father's drug store before giving up that profession to enter the University of Minnesota where he was a member of Delta Tau Delta and Nu fraternities.

After graduation in 1902 he married Carrie Inez Huntington and entered internship at St. Barnabas Hospital in Minneapolis. In 1905, he was made railroad surgeon for the Milwaukee and started the hospital in Webster which was above the drug store. From there he moved it to a private home and in 1913 he built the first unit of the Peabody Hospital named in honor of his father.

In addition to holding the presidency of the South Dakota State Medical Association, he was a senior member of the Western Surgical Association, a life member of the South Dakota Historical Society, and a member of the American Medical Association. He is survived by two sons and two daughters and twelve grandchildren, Mrs. Peabody having passed away in 1936.

This is



OCTOBER
1950
Vol. 3 No. 10

YOUR MEDICAL ASSOCIATION

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

NEWS NOTES

Dr. Percy B. Brazil, graduate of the University of Glasgow, is opening practice at Colman.

Dr. R. E. Jernstrom attended the International College of Surgeons meeting in Buenos Aires, Argentina this summer. Dr. and Mrs. Jernstrom traveled over 18000 miles on their trip through South America.

Dr. Marvin Hurewitz, formerly at Colman and Esteline has established his practice at Bryant.

Dr. Hans Jacoby of Huron has been named a South Dakota delegate to the American Cancer Society.

'50 ROSTER ADDITIONS

The following members were not listed in the August Roster Number:

W. A. Arneson, M.D., Sioux Falls, S. D.; E. G. Erickson, M.D., Sioux Falls, S. D.; J. F. Brenckle, M.D., Mellette, S. D.; R. M. Hause, M.D., V. A., Sioux Falls, S. D.; Vashti Curlin, M.D., Cheyenne Agency, S. D.; S. Friefeld, M.D., Brookings, S. D.; G. S. Owen, M.D., Rapid City, S. D.; J. A. Dillion, M.D., Rapid City, S. D.; R. W. Barr, M.D., Sioux Falls, S. D.; W. E. Donahue, M.D., Sioux Falls, S. D. and D. H. Manning, M.D., Sioux Falls, S. D.

SOUTH DAKOTA SENATOR BACKS MEDICAL CAMPAIGN

SENATOR KARL MUNDT SPEAKS UP FOR A.M.A

Senator Karl Mundt, long time foe of socialization and "too-big" government gave the A.M.A.'S. education campaign a shot in the arm by inserting in the Congressional Record-Appendix of September 7, the complete text of the National Education Campaign's advertisement in the United States News and World Report which asked business men to join the A.M.A.'s crusade to implement the "voluntary way."

In putting the advertisement in the Record, Senator Mundt said, "It is encouraging-positively stimulating—therefore, Mr. President, to be able to include in the Record an advertisement... in which the American Medical Association takes off its gloves, enrolls in the fight to save our American success formula, and invites American business men to join in a great national crusade for freedom."

In the same issue of the Record, Senator Mundt also inserted the remarks of Dr.

R. B. Robins of Arkansas which were published in the August issue of Medical Economics.

MENTAL HEALTH GROUP MEETS IN HURON

The South Dakota Mental Health Association held its Annual Meeting October 11th at the Marvin Hughitt Hotel in Huron.

The meeting was opened by Dr. E. S. Watson of Brookings who gave the Presidential Address at 1:30 p.m. and continued throughout the afternoon and evening.

Speakers on the program were A. A. Boegler of the State Penitentiary in Sioux Falls; Dr. H. W. Hogan of the State School in Redfield; Victor Hammer of the State Training School in Plankinton; Florence Dunn, R. N., State Dept. of Health; Mrs. Cecily Glasgow, Yankton State Hospital; and Governor George T. Mickelson. Governor Mickelson addressed the Annual Banquet and reported on the "Governors' Conference on the Mental Health Programs of the Forty-Eight States."

C. L. WENDT, M.D.

Dr. C. L. Wendt, Canton practitioner for the past fifty-five years, died at the age of seventy-seven on September 12. Dr. Wendt had been active in his city's activities for many years until his health failed recently. Cause of death was a stroke.

P. P. EWALD M.D.

Dr. Paul P. Ewald, Lead, passed away at his home August 17, 1950.

Dr. Ewald had been a member of the Homestake medical staff for more than thirty years and an active member of the Black Hills District Medical Society and the South Dakota State Medical Association.

Dr. Ewald married Evelyn Gilman in 1919 and prior to located in Lead had practised in Burden, Kansas for two years.

He is survived by his widow and two daughters.

THOMAS D. JONES, M.D.

Thomas D. Jones, M.D., Aberdeen surgeon, passed away Saturday, September 16, 1950. Dr. Jones was born in 1890 and graduated from Rush Medical College in Chicago in 1920.

**CHEST PHYSICIANS
TO MEET****NOVEMBER 13-18**

The American College of Chest Physicians will hold a postgraduate course in diseases of the chest at the Hotel New Yorker, New York, from November 13 to 18, 1950. The fee for the course is \$50.00 payable upon application for enrollment. Applications should be directed to the American College of Chest Physicians, 500

N. Dearborn St., Chicago 10, Ill.

Moderators and discussion leaders will be members of the staffs of New York City Medical Schools and Hospitals.

**ABERDEEN DISTRICT
HEARS VAN HEUVELEN**

The Aberdeen District Medical Society held a dinner meeting at the Sherman Hotel in Aberdeen on Tuesday evening, September 12th. Dr. G. J. Van Heuvelen, Pierre, Superintendent of the State Department of Health, gave a very interesting talk on "Medical Defense Against Atomic Attack." About 25 members attended.

After discussion on a proposed Annual Registration for Physicians a majority voted for such an annual registration fee of not over \$2.00. The next meeting of the Society will be held sometime in October.

Prize Essay Contest

The American Dermatological Association is offering a prize of three hundred dollars for the best essay submitted of original work, not previously published relative to some fundamental aspect of dermatology or syphilology. The purpose of this contest is to stimulate younger investigators to original work in these fields.

Manuscripts typed in English with double spacing as for publication, together with illustrations, charts and tables, are to be submitted in triplicate not later than February 1, 1951, and should be sent to Dr. Louis A. Brunsting, Secretary, American Dermatological Association,

102-110 Second Avenue, Southwest, Rochester, Minnesota.

**SCHOOL ENDOWMENT
FUND RECEIVES
CONTRIBUTIONS**

The first contribution by a member of the Medical Association in South Dakota to the Medical School Endowment Fund has been made by Dr. G. E. Whitson of Madison, who contributed \$100.00. Other contributors are Drs. L. J. Pankow, J. L. Dickenson, R. G. Mayer, L. M. King, A. P. Peeke, Wilbert Hieb, Reagan & Reagan, A. J. Miller.

Previously a \$500.00 contribution from a Sioux City attorney had started the ball rolling.

Dr. L. J. Pankow, President of the State Association in making his official visit to the districts is asking that all members of the Association contribute to make this fund large enough to be worthwhile. Information on Dr. Pankow's plan can be found on the editorial page.

OFFICERS' ELECTED

The following officers were elected at the new St. Ann's Hospital, Watertown: President — H. R. Brown, M.D., Vice-President — O. S. Randall, M.D., Treasurer — G. R. Bartron, M.D.

**ATOMIC MEDICINE
IS HURON TOPIC**

G. J. VanHeuvelen, M.D., State Health Officer and member of the Governor's Civil Defense Planning Committee, discussed the role of medicine in an atomic attack before the Huron District Medical Society and guests.

PHARMACEUTICAL DIVISION

Charles F. Van De Walle, Editor

THE PUBLIC'S HEALTH — YOUR FIRST CONCERN

HEART DISEASE AND THE LIFE SPAN

Every year, despite a lengthening life span, heart disease is taking an increasing toll of those under 65. As a result of the strides made by medical science in the past four decades in bringing under control the infectious menaces such as typhoid, tuberculosis, and the childhood diseases, formerly outstanding killers, the average life expectancy has been increased from 49 years in 1900 to that of 67 years today. Yet each year about 250,000 persons die **before** reaching age 67 — as a result of heart disease.

Implicit in the longer life now promised the average individual is that more years of usefulness are required today of his heart than was the case in times past. A new emphasis is needed on conserving the vigor and "staying power" of life's vital pump.

A large number of the deaths due to heart disease, particularly in early and middle adult life, **are** preventable. While degenerative heart disease is a hazard of old age and is impossible to prevent entirely, much can be done to postpone its onset and to slow down its progress among those in the middle-aged and younger groups who constantly are adding to the growing number of cardiac cases.

Early discovery is of the greatest importance, implying not only prompt institution of therapy, but often the alteration of a too strenuous pace of life in time to prevent serious damage to a heart already beginning to gasp from its overload. Early steps to reduce weight in obese persons may be necessary in order to relieve the added burden placed upon the heart by excess weight.

Since so much of the value of treatment of heart disease depends upon the patient himself, an informed public must be the basis for an intelligent approach to the problem of the individual and the community. In this the pharmacist is a valuable ally of the physician; not only in getting a patient to a doctor, but

as a source of reliable information to the community, since it is to the pharmacist that people often turn first with their complaints.

Treatment of heart disease is not one but a number of problems, based on the type of heart disease. The causes and the conditions of these types vary, but their effects are the same — all sap the endurance power of the heart. In the search for cure the problems are being dealt with on broad fronts — by surgery, diet, drugs, antibiotics, and even by psychotherapy.

As a result of modern surgical pioneering, the scalpel — on the tip of a surgeon's finger — is now probing the heart itself to correct the ravages of rheumatic fever and the malformations of congenital defects, both important causes of crippling heart disease.

Similar advances are being made by chemotherapy. Sulfa drugs are forestalling rheumatic fever and preventing damage to delicate heart valves. Penicillin is curing 70 to 75 percent of cases of bacterial endocarditis which formerly were 99 percent fatal. New drugs are being used to reduce blood pressures that have reached dangerous heights. Dicumarol and heparin, by lowering the clotting ability of the blood, are reducing the complications that follow a coronary attack.

Medical science is thus actively taking up the challenge posed by heart disease. With an increasing fund of knowledge resulting from added support for research, medical science is mapping out new areas of prevention, treatment and cure. But along with an increased life span and the promise of even more research progress yet to come, an important responsibility still rests with the individual: This is to be alert in bringing symptoms to the attention of a physician **early**. In this chain of communication the pharmacist plays an important and vital role.

NEWS NOTES

Barney Wilder, who has attended Drake University, plans to return to complete the course, this will be his last year. He has been employed at the Beckers Drug Store in Rapid City, S. Dak. during the summer.

The Rapid City Medical Society entertained the Rapid City Pharmaceutical Society, their wives and families at Moose Lodge. The attendance was 100%. This was the second year.

The Rapid City Pharmaceutical Society plans to hold a picnic for members and their families the second week in September.

James Miller of Arlington has purchased the Maxwell Drug Store from **C. C. Maxwell**. Jim graduated from State College in 1949 and received his registry this year. C. C. Maxwell holds the No. 4 license in S. D. and has been one of the oldest practicing pharmacists in the state.

Jean Lampe of Huron was married on August 13th to Paul Hammerquist of Rapid City. Mrs. Hammerquist graduated from State College in 1947 and has been employed in the Mills Drug Store for the past three years.

Dale Auchampach of the Shirley Pharmacy in Brookings attended the McKesson Robbins Sales and Merchandising School in Minneapolis on August 5th and 6th.

Nial Tidball has been appointed District Commander of the American Legion in the Aberdeen District. He is the son of **Clyde Tidball** who is employed in Kenball's Drug in Brookings.

The Executive Committee of the Pharmaceutical Association met at Huron on Oct 1st.

Charles M. Dietz, (State 1950) Mapleton, Minn. has been called to active duty in the Naval Reserve.

Floyd (Rabbitt) Wilkening (State 1950) is serving his apprenticeship at Walgreen Drug, Sioux Falls.

Lloyd (Whitey) Knutson (State 1949) pharmacist at Haggars, Sioux Falls has been called to duty in the Army.

Sid Anderson (State 1950) who has been serving his apprenticeship at Lewis Drug, Sioux Falls, has been called to duty in the Army.

Don Haney (State 1950) is employed at Family Drug, Sioux Falls.

PHARMACY LINKS MEDICAL PRACTICE WITH PUBLIC HEALTH

The many opportunities which daily confront the pharmacist foreducation of the public concerning personal health are emphasized in an address by Thomas Parran, M.D., which appears in the April issue of the **Journal of the American Pharmaceutical Association, Practical Pharmacy Edition**. The remarks of Dr. Parran, who is Dean of the Graduate School of Public Health, University of Pittsburgh, and former Surgeon General, U. S. Public Health Service, were delivered at the dinner of the recent annual meeting of State Boards and Colleges of Pharmacy, District No. 2, held in Pittsburgh.

Dr. Parran refers to the pharmacist "as a man with professional training in the sciences which are basic to health" and comments upon the fact that the pharmacist's "friends, neighbors and customers look to him for health advice and for community leadership on health matters."

"Professionally," Dr. Parran continues, "the pharmacist works hand in hand with the doctor of medicine. He is the firm link between the practice of medicine and the general public. Frequently he is consulted before the physician. Frequently, also, it is to the pharmacist that the dissatisfied patient has recourse — the patient who has received poor medical care or who has not understood the nature and limitations of good care which he may have received. At this stage such a patient obviously is ripe for the grandiloquent claims of the quack or the charlatan. In many cases it is the pharmacist who steers him back into safe medical hands, though not necessarily the same hands. In my opinion, there should be more general recognition among physicians, and among the public as well, of this vital service which pharmacists have long and unostentatiously performed."

In his discussion of the public health team, Dr. Parran states that "public health represents a composite of the sciences. Its roots are innolege contributed from the biological, the social and the natural sciences. Consequently, for its greatest effectiveness in practice, public health involves the concept of the group approach — or what is called, colloquially, 'the team'."

(Continued on Page 320)

AUXILIARY ACTIVITIES

PRESIDENT'S MESSAGE

As I start my first message to the Woman's Auxiliary to the South Dakota Medical Association, I find it hard to express my feelings. It is an honor to serve as your president but with it goes a grave responsibility. After attending the Auxiliary Sessions at the A.M.A. in San Francisco, I am more aware than ever that we should all take more genuine interest in our organization.

We must become more purposeful and meet our opportunities and responsibilities to the best of our ability. The National Officers and Standing Committee Chairmen have spent much time and thought to outline programs, with various suggestions to be used by the state auxiliaries. A great deal of material is available to be used in our districts for instruction and for information. It is a shame not to take advantage of these sources of information because they are true facts and authentic figures. It is our responsibility to bring the truth to the un-informed and the mis-informed.

This is a crucial year in many ways. It is election year. As citizens it is our duty to vote, to see that others are correctly informed and that they get to the polls to vote. The men we send to Washington are the ones who will help formulate our futures. So many forms of Socialism are infiltrating into our government policies and are already affecting our way of living, that we must alert ourselves. Let's give up our socials and give our time and effort to help fight this trend of socialism and this so-called Welfare State.

Let's all shoulder our responsibilities and make this an outstanding year for our auxiliary.

REPORT ON THE A.M.A.

I attended the Auxiliary Sessions at the A.M.A. meeting in San Francisco June 26-29 and found them interesting and inspiring.

It was an honor to represent the Woman's Auxiliary to the South Dakota Medical Association, as presidential delegate. Since our membership had increased during the year

to near the 300 mark, we were allowed, for the first time, 3 regular delegates. I was happy to answer Roll Call, "South Dakota allowed 4 delegates All present!" Other official delegates were: Mrs. T. J. Billion, Sr., Sioux Falls; Mrs. H. Russell Brown, Watertown; Mrs. A. K. Myrabo, Sioux Falls. These ladies will report to their districts on the convention at one of the first fall meetings.

There were 1,703 auxiliary members registered at the convention. This included representatives from all forty-eight states, the District of Columbia, and the Territory of Hawaii. According to the Organization Chairman's report there were 53,606 auxiliary members in June 1950, an increase of nearly 5,000 over 1949. Some of the increase, no doubt, was due to the organization of four new state auxiliaries. These last four states to join the National Auxiliary are, Vermont, Maine, Maryland and New Mexico. Pennsylvania has the largest membership with over 5,000, with New York and California running a close second.

We met Mrs. Paul C. Craig, our National Public Relations Chairman, who attended our state meeting at Huron in May. Also talked with Mrs. Eustace Allen and Mrs. Luther Kice, past National Presidents who attended our state meetings in 1948 and 1949 respectively. Mrs. Craig's annual report was one of the outstanding ones of the convention and received more ovation than any other.

Attending this National Convention was an experience to be remembered. I do feel that we should definitely send at least two delegates to the Convention each year to represent our state and to bring back a report to us.

STATE COMMITTEE CHAIRMAN

Public Relations	_____ Mrs. Howard Wold, Madison.
Program	_____ Mrs. C. B. McVay, Yankton.
Legislative	_____ Mrs. F. R. Salladay, Pierre.
Bulletin	_____ Mrs. V. V. Volin, Sioux Falls
Today's Health	_____ Mrs. Merritt Auld, Yankton.
Historian	_____ Mrs. Wm. Sercl, Sioux Falls.

These chairmen will have articles with information and suggestions for the districts in the Journal from time to time.

NOTICE TO DISTRICT OFFICERS

As you plan your activities for the year please keep these things in mind.

1. National has decided to work more directly with the officers of the districts. I have been requested to send in names of district officers and chairmen of the committees. Literature will be mailed out directly to these ladies. So it is necessary for you to send me the complete list of officers and chairmen as soon as possible so I can report these to the National Office.

2. All officers should subscribe to the Bulletin. This is the official Auxiliary booklet published quarterly. It contains official programs, reports and much general information which is of interest to all of us. The subscription price is \$1.00 per year. Send your subscriptions to the state Bulletin Chairman, Mrs. V. V. Volin, 205 S. Pairie, Sioux Falls, S. Dak.

3. If you do not have the following chairman in your district please appoint them and send me the names:

Organization
Program
Legislative
Public Relations and Publicity
Bulletin
Today's Health

I shall try to have suggestions each month for you. After our Fall Conference in Chicago, which your President-elect, Mrs. Howard Wold and I will attend November 2-3, we will be able to give you a direct report from our National Officers.

Please send the information and names of your committee chairmen as soon as possible because I must have these lists into the Chicago office before November 1st.

Mrs. A. P. Reding, Pres.

(Continued from Page 318)

Dr. Parran comments also upon the persistent battle which the leaders of pharmacy have waged against the inroads of commercialism. Recognizing that the present era is highly competitive and that business shrewdness within its proper limits is a quality needed in every profession, Dr. Parran warns that "The battle against commercialism—the battle to maintain professional ethics—must go on. We are all a part of it, each category of the health sciences. It is possible that not all categories have acknowledged it as frankly or fought it as openly as has pharmacy."

(Continued from Page 304)

penicillin-resistant staphylococcal infection).

3. Emergence of resistant microorganisms as an incident of treatment (e. g. streptomycin therapy).
4. Alteration of bacterial flora during treatment (e. g., aerosol treatment of respiratory infection).
5. Inadequate dosage.
6. Too early withdrawal of therapy (e. g., chloromycetin in typhoid).
7. Treatment in fulminating infection started too late.
8. Inaccessibility of the lesion to treatment (e. g. fibrotic tuberculosis).
9. Dependence on an anti-biotic to function for indicated surgical or medical auxiliary treatment (e. g., incision and drainage).
10. Incompetence of the defenses of the host to overcome infection (e. g., agranulocytosis).

- Many Locations are Available for Physicians in South Dakota.
- Some are in Areas of Civilian Emergency.
- Some have Hospital Facilities — Some can be had in neighboring towns.

- If you know a physician now looking for a location —
- Have him contact The Medical Association Now.
- That's

300 First Nat'l. Bank
Sioux Falls, S. D.

Pathology of Chest and Mediastinal Tumors

by Ferdinand C. Helwig, M.D., Department of Pathology,
St. Luke's Hospital, Kansas City, Missouri

It is manifestly impossible to discuss the pathology of all of the tumors that the title of this paper indicates, in the time allotted. Excluding the skin of the chest wall, tumors of the soft parts alone comprise a surprisingly long list of neoplasms. The lipomata are of interest because they sometimes attain huge dimensions. Sarcoma is most frequently fibrogenic and the muscles and nerves also may give rise to both benign and malignant tumors. Large, cystic hygromas are not rare; osteoma, osteogenic sarcoma, chondroma, chondrosarcoma, giant cell tumor, myeloma and Ewing tumors are all occasionally observed in these parts. I have one case which illustrates a rather unique type of growth; namely, a low grade chondrosarcoma which springs from the rib (Fig. 1), grows very

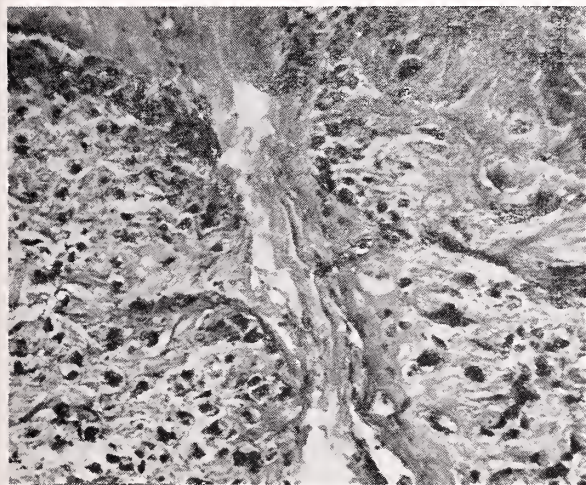


Fig. 1. Low grade chondrosarcoma of rib showing islands of young cartilage with nuclear variations and invasion of connective tissue. (Low power).

slowly, and as in the present case, repeatedly recurs locally. It may entirely fill one side of the chest cavity before causing death.

Tumors of the pleura are of chief interest because they are practically always secondary to malignancy elsewhere, particularly in the lung and breast. They often produce effusions containing neoplastic cells. More-

over, the pleural metastases may be of large dimensions with a minute pulmonary carcinoma as the underlying primary growth. These tumors account for many of the reports in the older literature of pleural endotheliomas which Robertson showed many years ago to be almost always either metastatic deposits or direct extensions.

I have grouped the mediastinal tumors into anterior and posterior divisions because in the anterior mediastinum we have a diversified group of neoplastic diseases including those arising, many think, from thymic remnants and include lymphosarcomas (Fig. 2), Hodgkin's disease, and so-

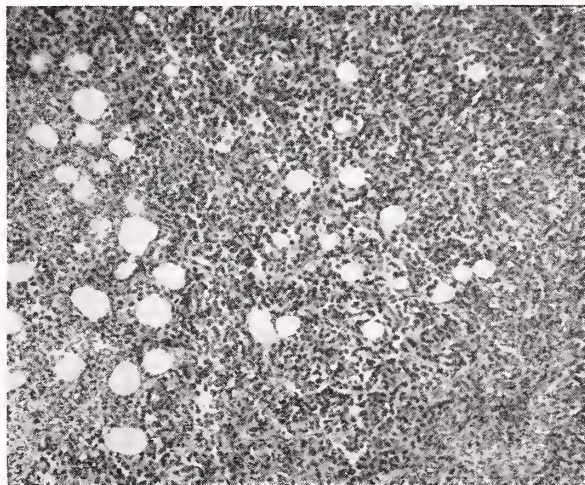


Fig. 2. Diffuse type small cell lymphosarcoma of anterior mediastinum showing diffuse invasion of fat. (Low power).

called thymic carcinoma; whereas the posterior group is almost exclusively neurogenic. Often it is difficult in the advanced cases to tell whether these lymphoid thymomas arise from normal lymphoid tissue or from thymic remnants. These tumors are rarely amenable to surgery since complete removal is usually impossible but they are ordinarily relatively irradiation sensitive and, therefore, are best treated by irradiation. We also have occasional teratomas and pericardial cysts. Teratomas may lie dormant for a long

period and then suddenly spring into remarkable activity (Fig. 3). I observed such

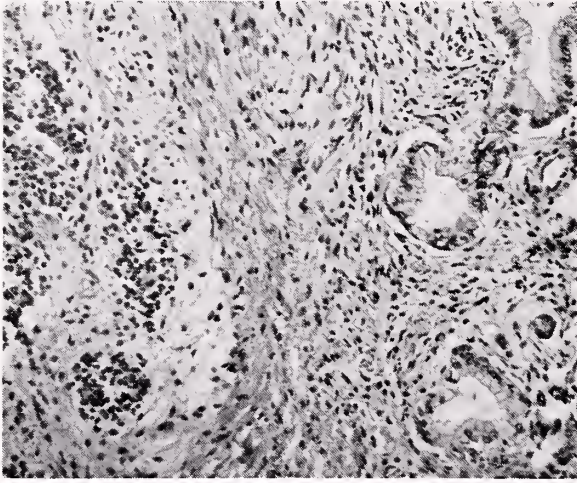


Fig. 3. Teratoma of anterior mediastinum showing secretory glandular elements. (low power).

a tumor recently which upon removal weighed 9-1½ pounds and recurred to equal size in a matter of months. Sections showed a surprising variety of histologic patterns.

Primary or secondary tumors of the heart are comparatively rare. In one series of 41,000 necropsies,¹ only 98 secondary metastatic malignancies were recorded. It has been my good fortune to see two cases of rhabdomyosarcoma which is rare. I have studied two myxomas or pseudomyxomas, one growing from the pulmonary valve, and the other from the mitral valve. There is some controversy as to whether these growths represent myxomatous degeneration of an organized thrombus or are true neoplasms. Microscopically, however, the structure is that of myxoma uncomplicated by other morphologic structures suggesting myxoid degeneration of inflammatory fibrous tissue. Perhaps the most common source for secondary tumors is bronchogenic carcinomas which may directly invade the cava, compress the pulmonary arteries, penetrate the pericardial cavity, often around the vessels at the base, with epicardial extension. Deep penetration into the myocardium also may occur. In my own material I have encountered metastatic cardiac lesions from a variety of neoplasms including such different primary sources as hypernephroma and retinal melanoma. Melanomas, of course, seem to thrive in almost any soil and I have seen metastases from this tumor to heart muscle

more often than from any other single growth except direct extensions from lung malignancy.

The posterior mediastinal growths, as mentioned, almost invariably arise in nerve tissue. I have seen no cystic or primary tumors of lymphatic origin here. Although undoubtedly many of these growths early may be benign neurofibromas or ganglioneuromas, their tendency to become malignant is remarkable. One recent case which I have studied at the University was reported by Wahl and Robinson.² It was in a four year old boy and was a highly malignant periganglionioma mixed with neuroblastic elements (Fig. 4). This tumor showed the same strik-

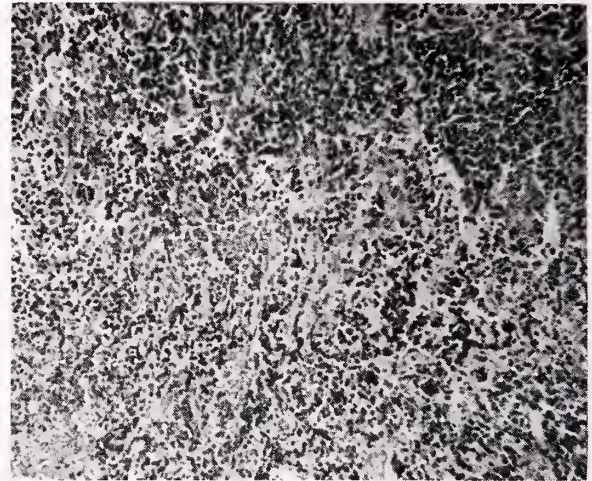


Fig. 4. Neuroblastoma of posterior mediastinum showing diffuse growth of small, round, primitive neurocytes. (Low power).

ing metastatic proclivities encountered in the Hutchinson type of neuroblastoma of the adrenal medulla. Another case from the same hospital was a ganglioneuroma which was removed surgically without complications. This tumor was quite large (Fig. 5). In Graham's series at Barnes Hospital,³ over 40 percent of the posterior mediastinal tumors were malignant at the time of operation. Therefore, he rightfully insists on prompt removal at the time the tumor is first discovered.

A variety of tumors has been reported in the trachea including fibromas, chondromas, etc. There is, however, one growth that is of considerable interest; namely, so-called mixed tumors or adenomas of the trachea. These growths have also been captioned oncocyoma and tracheal carcinoid. They occur in younger individuals than carcinoma,

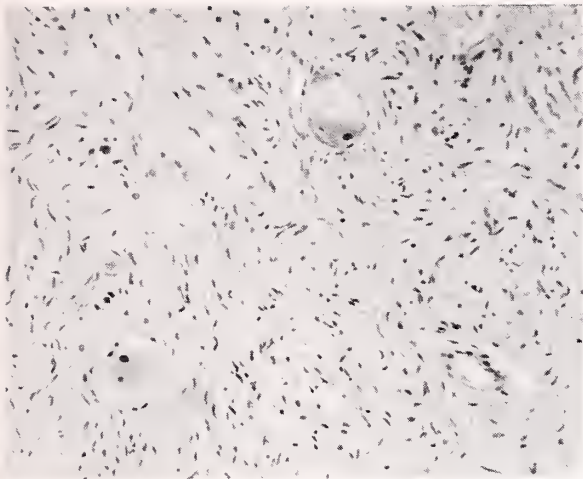


Fig. 5. Ganglioneuroma posterior mediastinum showing ganglion cells and adult nerve elements. (Low power).

usually appearing in the early thirties or late twenties, and grow very slowly. Microscopically they resemble to some extent certain mixed tumors of the parotid gland (Fig. 6),

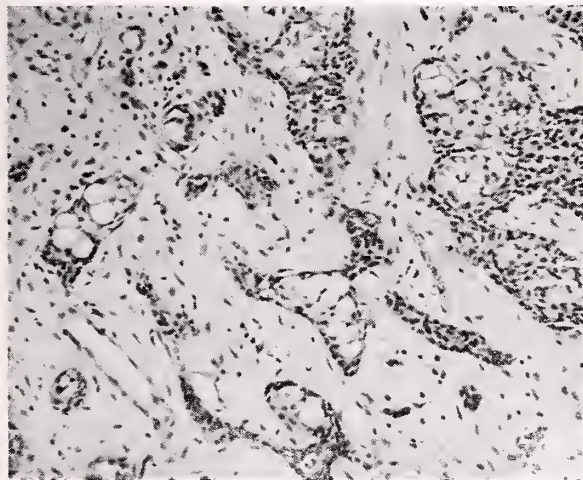


Fig. 6. So-called mixed tumor of trachea. Observe similarity of histologic pattern to that often seen in salivary gland tumors. (Low power).

and in the small number of cases which I have had an opportunity to study they have all, after repeated recurrences, ended as invasive malignant tumors after several years duration. In my material they have been more frequently observed in females, although some series show them occurring in the male about twice as frequently as in the female.⁴ One case which I followed over a number of years recently expired. The growth began to produce symptoms when the patient was 27 years of age. Repeated recurrences over a period of years, treated

by surgery and radon implantation, finally resulted fatally after eight years.

The major bronchi also may contain non-malignant tumors rising from cartilage and fibrous tissue but the bronchial adenoma is a tumor which has been subject to considerable study over the past few years. Some observers think they spring from sub-mucous glands and in the earlier stages are often observed covered with intact bronchial mucosa. Furthermore, they have been traced directly into the mucous glands of the sub-mucosa. Many of these cases, after long observation, become invasively malignant bronchogenic carcinomas. The cell type is usually that of an adenoma with small acini lined with low, often well differentiated, cuboid cells, or it may have a papillary appearance. All of the cases which I have followed over any period of time are now dead (Fig. 7).

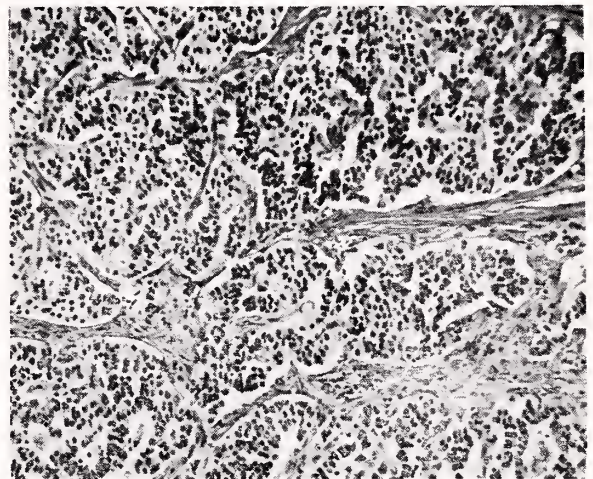


Fig. 7. Invasive "benign?" adenoma of bronchus (Low power).

The smaller bronchi on rare occasions may be the seat of cavernous hemangioma which extends out into the pulmonary parenchyma. One example of this growth I observed in the upper lobe of the left lung which, after repeated serious hemorrhage was cured by lobectomy. The microscopic appearance was classical of cavernous hemangioma.

The most important tumors of the chest, because of their extraordinary frequency, are the bronchogenic carcinomas. A great deal has been written regarding etiology of these growths and yet, aside from the observations at Schneeberg and Joachimsthal, where most of the evidence points to radon dust in the cobalt mines and arsenic dust in

the Erzgebirge mines, there is little completely convincing evidence that other dusts are of etiological significance although practically every known inhaled substance has been accused.

There is one interesting tumor which occurs in sheep known as Jaagsiekte disease⁵ which has also been observed in man. The picture is that of countless papillary adenomas growing diffusely throughout both lungs (Fig. 8). Ordinarily the growth does

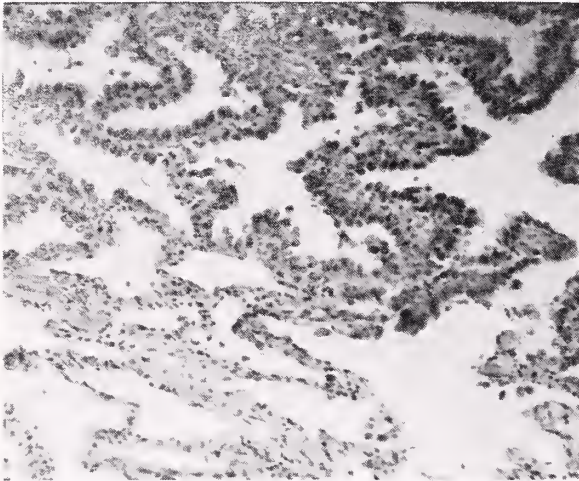


Fig. 8. Jaagsiekte's disease or diffuse, "infectious" adenomatosis of lung. (Low power).

not metastasize. The opinion of most writers is that the disease is produced by a virus. I have studied one such example in a middle aged woman with widespread dissemination throughout both chests but no metastatic lesions were found at autopsy.

Occasionally in routine autopsy material we encounter minute lesions of the lung which are frankly invasive carcinoma. I have one such example which can almost be incorporated within the low power magnification of the microscope. It should not be overlooked, however, that these tumors may give rise to distant metastases. One such neoplasm required a great deal of search before it was discovered. The patient was completely disoriented and extremely violent before death and the clinical diagnosis was acute encephalitis. However, at necropsy the brain was the seat of countless pinhead sized metastatic deposits.

Most writers have divided the bronchogenic carcinomas into three main groups; namely, adeno- and undifferentiated. The latter group includes the oat cell, round cell and pleomorphic cell growths. The adeno-

carcinomas may be further divided into mucin producing, papillary and multicentric. Certain it is that by and large those showing the more adult squamous characteristics offer a better prognosis than the others. However, it should not be overlooked that there are remarkable degrees of dedifferentiation in both the adeno- and the squamous groups and at least 25 percent of all lung carcinomas that I have studied have shown mixed elements where we may find squamous and undifferentiated or adeno- and undifferentiated histologic pictures. When the pattern is that of a fairly adult squamous cell growth producing large amounts of keratin, the tumor at times has a tendency to undergo central necrosis and secondary cavitation (Fig. 9). On several occasions collapse therapy

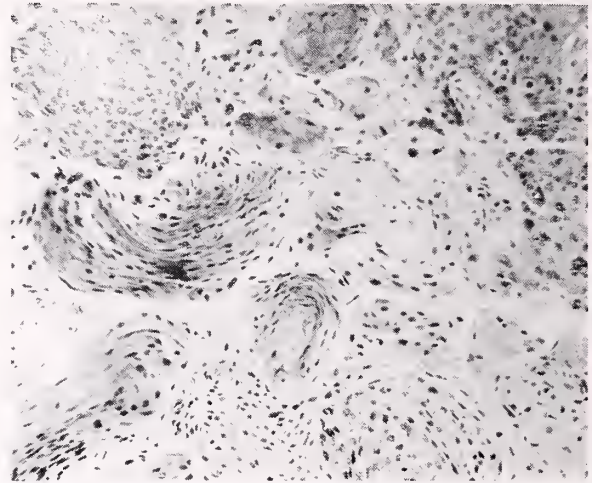


Fig. 9. Squamous cell carcinoma of lung. Note large masses of dead and dying squamous epithelial cells and keratinized material. (Low power).

has been instituted under the impression that the cavity was tuberculous. I have several tumors which illustrate the necessity for either cutting a large number of blocks or playing percentage. In one case, one adrenal gland was the seat of a massive growth which was totally undifferentiated with the morphology of an anaplastic spindle from sarcoma (Fig. 10). Multiple nodules were present in the lung, many of them fairly sharply defined. Squamous elements were encountered only after a very large number of sections were made from the pulmonary (Fig. 11). Sometimes the tumors will maintain their architectural pattern in the metastatic deposits with remarkable fidelity, whereas the exact opposite also may occur.

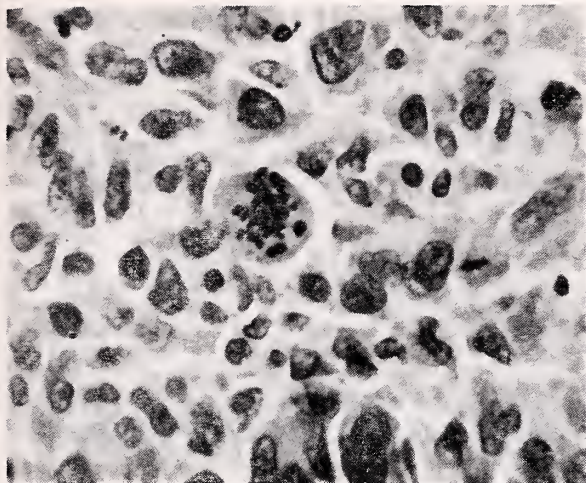


Fig. 10. Metastatic mass in adrenal gland. Note marked anaplasia. (High power).

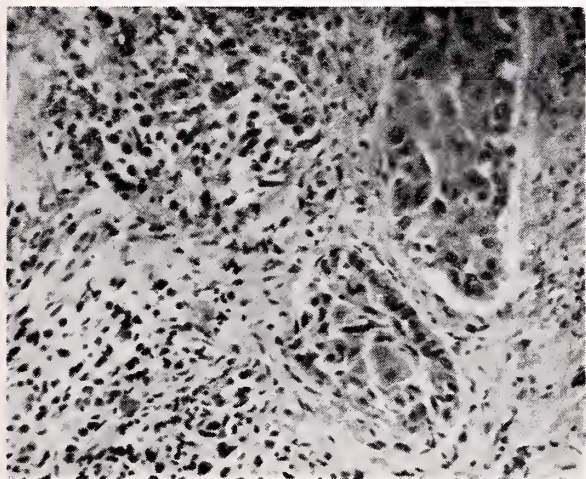


Fig. 11. Primary squamous cell carcinoma in lung. Only rare nests with squamous pattern found after many sections. (Low power).

In deposits in the central nervous system, particularly when deep in the cortex, where

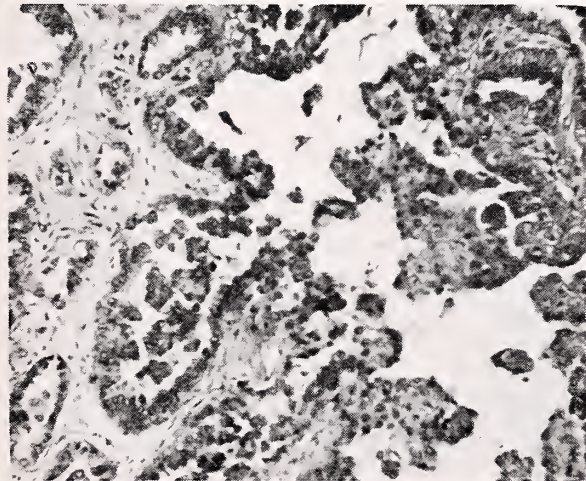


Fig. 12. Papillary adenocarcinoma of bronchus. (Low power).

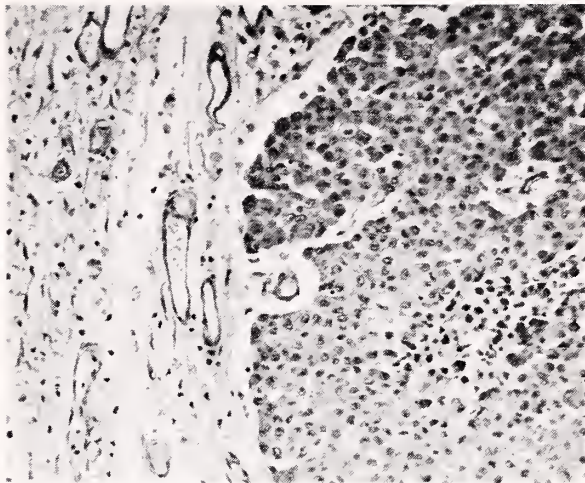


Fig. 13. Metastatic deposit in brain from primary tumor pictured in Fig. 12. Observe paucity of stromal elements. (Low power).

the only fibrous tissue available is found about tiny blood vessels, the stromal elements of the metastatic lesion will be almost entirely absent (Figs. 12 and 13). About one third of my own bronchogenic cancers have shown metastatic deposits in the central nervous system and approximately the same number in the adrenal, either unilateral or bilateral.

As would seem self-evident, the oat cell and undifferentiated tumors in my own material have been generally hopeless from the time that they first began to show symptoms. I have seen some cases that seemed resectable that were resected and failed to survive the surgery, where minute metastatic deposits were found in the liver and adrenal gland (Figs. 14 and 15).

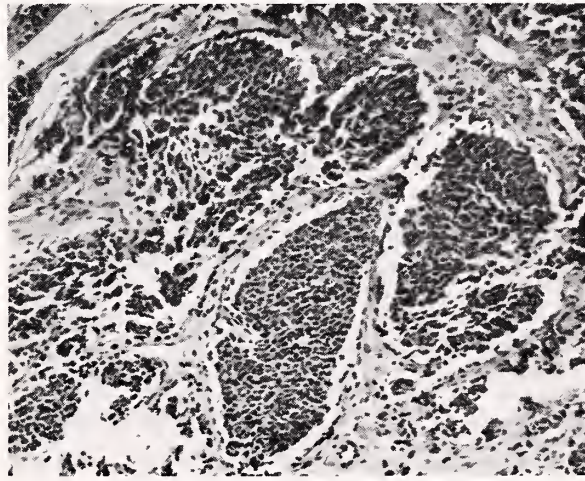


Fig. 14. Very small oat cell carcinoma of lung, surgically resected. (Low power).



Fig. 15. Miniature deposit in adrenal gland from tumor shown in Fig. 14. (Low power).

There is one peculiar growth, namely the miliary type, which some observers feel is multicentric in origin, all of my cases of this type having been adenocarcinomas, occasionally with practically no pulmonary symptoms but with numerous deposits in bone. Two such cases were treated for fractured spine and pulmonary symptoms became manifest only after several weeks of such treatment. Whether or not these represent a seeding of the lung from some small focus by inhalation or are true multicentric growths is still subject to controversy. It has been shown experimentally by Fuerth⁶ that the epithelium of the bronchi is no safe barrier against the dissemination of tumor cells. By instilling cancer cells in the nostrils of lightly anesthetized mice, the tumor cells reached the lung and produced lung cancers. Furthermore, it is conceivable that some of the sharply defined metastases in the pulmonary parenchyma of the opposite lung might be aspiratory in origin.

Because the lung is such a common site for both lymph and blood borne metastatic deposits from malignant tumors elsewhere in the body, any discussion of secondary tumors can not be covered in this paper. It might be mentioned, however, that occasionally metastatic deposits may invade the wall of a larger bronchus and produce ulceration with duplication of the symptoms and findings of a primary bronchogenic carcinoma. I have seen this occur with hypernephroma and other distant primary lesions. Therefore, the mere presence of a tumor by bronchoscopic examination is not proof of its primary

origin and the diagnosis can sometimes be established only by biopsy of a bronchoscopic specimen.

Of great interest is a recent paper by Alexander⁷ in which he reviews the results of pulmonary resection of 24 solitary metastatic pulmonary tumors. He emphasized that "the well outlined shadow in a lung at the time of or months or even years after removal of a malignant lesion from some other part of the body is prima facie evidence that the pulmonary tumor is metastatic."

One other species of tumor should be mentioned; namely, the small round cell tumor which histologically resembles lymphosarcoma. One such case recently was explored at the Mayo Clinic and found to have extensive implants over the pleura with a large mass in the left apex. The patient received very extensive external irradiation and was well for a matter of several months. Finally he began to have bilateral pleural effusions from which he died. At the necropsy one mediastinal node the size of a robin's egg was found to be converted into hyaline fibrosis, and a lesion in the pulmonary parenchyma the size of a golf ball was found which was also converted into hyaline fibrosis. These were the only remnants of tumor that we could find except for marked sclerotic changes in the pleura. Such a spectacular regression is seldom seen in the small cell epithelial growths.

A word should be said about the superior sulcus or Pancoast tumors. They usually are apical bronchogenic carcinomas. In a recent report of 151 cases from the literature and their own series, Herbut and Watson⁸ found that the majority were primary carcinomas of the lung. In only eight cases did they consider that the examination was thorough enough to exclude an origin in some distant organ. They mention among primary lesions, branchial rest, thyroid and larynx carcinomas, pleural mesothelioma and Hodgkin's disease.

Finally a word about the application of Papanicolaou's method for the study of sputum and bronchial washings. This procedure most certainly should be employed but to use it alone for a diagnosis of pulmonary carcinoma should be accepted with extreme caution. In recent months three

(Continued on Page 348)

Tumors of the Head and Neck*

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To discuss thoroughly and completely all the tumors of the head and neck is a task of textbook magnitude. Therefore an outline of some of the more frequent and more interesting tumors is presented. We are using the term "tumor" rather loosely to suggest a swelling rather than limiting the term to neoplasms. This is followed by a brief summary of some of the pertinent facts concerning some of these particular lesions. In certain instances in the discussion some of the lesions will be grouped to avoid repetition. Intracranial neoplasms and tumors of the eye have been purposely neglected.

Classification

- I **Congenital anomalies**
 - A. Cyst of the thyroglossal duct
 - B. Branchiogenic cyst
 - C. Cystadenoma lymphomatosum
 - D. Cystic hygroma
 - E. Dermoid cyst
- II **Skin**
 - A. Squamous-cell epithelioma
 - B. Basal-cell epithelioma
 - C. Melano-epithelioma
- III **Upper part of the respiratory tract**
 - A. Nose and paranasal sinuses
 - 1. Polyps
 - 2. Connective tissue tumors
 - 3. Malignant tumors (predominately squamous-cell epithelioma)
 - B. Nasopharynx
 - 1. Polyps
 - 2. Connective tissue tumors
 - 3. Malignant tumors
 - a. Squamous-cell epithelioma
 - b. Lympho-epithelioma
 - C. Larynx
 - 1. Polyps
 - 2. Papilloma
 - 3. Vocal nodules

- 4. Leukoplakia
- 5. Squamous-cell epithelioma

IV Upper part of the gastro-intestinal tract

- A. Mouth
 - 1. Lips
 - 2. Tongue
 - 3. Floor of mouth
 - 4. Mucous membranes
 - 5. Gums
 - a. Epulis
 - 6. Jaw
 - a. Adamantinoma
- B. Pharyngeal wall
 - 1. Squamous-cell epithelioma
- C. Esophagus
 - 1. Squamous-cell epithelioma

V Lymph nodes

- A. Primary neoplasms—malignant lymphomas
 - 1. Lymphosarcoma
 - 2. Reticulum-cell sarcoma
 - 3. Hodgkin's disease
 - 4. Giant follicular lymphoma
- B. Secondary neoplasms—metastatic carcinomas
- C. Chronic infections—as a differential diagnosis
 - 1. Tuberculosis
 - 2. Boeck's sarcoid

VI Salivary glands

- A. Mixed tumors
 - 1. Typical mixed-tumor type
 - 2. Cylindroma type
- B. Mikulicz
 - 1. Disease
 - 2. Syndrome

VII Thyroid

- A. Benign tumors—considered as metabolic diseases
- B. Malignant tumors
 - 1. Adenocarcinoma

* Read at the meeting of the South Dakota Division of the American Cancer Society, Sioux Falls, South Dakota, October 11 to 13, 1948.

VIII **Parathyroid**

- A. Adenoma
- B. Adenocarcinoma

IX **Miscellaneous**

- A. Usual connective tissue tumors, benign and malignant varieties
- B. Chordoma
- C. Tumors of the carotid body

Cyst of the Thyroglossal Duct

The main portion of the thyroid gland develops as an evagination from the floor of the primitive pharynx in the region destined to become the base of the tongue. From this anlage there may persist the thyroglossal duct extending from the foramen caecum to the isthmus of the thyroid. Its usual fate is fibrous obliteration; however, it sometimes persists and portions may undergo cystic dilatation. It then presents itself as a round to oval midline tumor which is usually 5.0 cm. or less in diameter. The duct is usually in close association with the hyoid bone and may even traverse the substance of the bone. Therefore, to prevent recurrence it is necessary that the surgical procedure devised by Sistrunk¹ be followed. He advised complete removal of the cyst, the central portion of hyoid bone and the tract of the cyst up to the base of the tongue.

Branchiogenic Cyst

Branchiogenic cysts develop as a result of failure of closure of the second or third branchial clefts. These cystic tumors present themselves usually in close relation to the sternocleidomastoid muscle. They may open externally or internally. They often fluctuate in size from time to time in relation to spontaneous drainage. They frequently become infected, with resultant fistula formation. Histologic study often reveals lymphoid tissue, sometimes with definite follicle formation, beneath the epithelium. This condition is not seen in cysts of the thyroglossal duct. Malignant lesions arising from these structures have been described. Lahey^{2, 3} has expressed the belief that these branchiogenic lesions should be treated surgically rather than by attempts to close the structures with sclerosing agents.

Cystadenoma Lymphomatosum

Cystadenoma lymphomatosum (Warthin's tumor) is a rare tumor of the parotid region. Its histogenesis is debatable. One theory is that it is of branchial origin; however, some

investigators point out that the branchial pouches takes no part in the formation of the parotid gland. The tumor usually occurs in the older age group (fifth, sixth and seventh decades). It is benign, slowly growing and found predominately in males (5:1). The microscopic picture of the typical lesion is characteristic. There are glandular cystic spaces lined by epithelium resembling that of the parotid tubules, both cytologically and in that the cells are two layers thick (fig. 1). The stroma is of a lymphoid variety

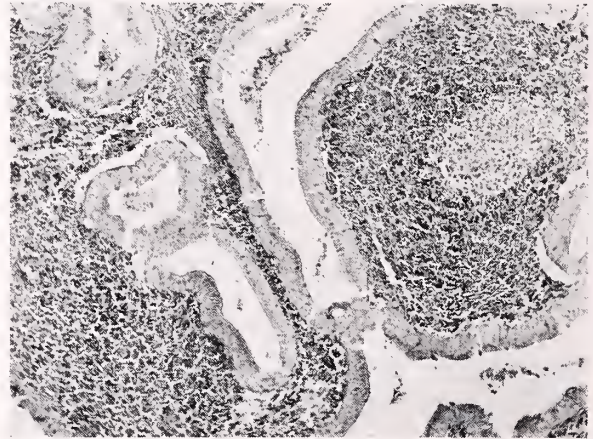


Fig. 1. Papillary cystadenoma lymphomatosum (Warthin's tumor). The pale epithelium forms cystic spaces, and subjacent to the epithelium is lymphoid tissue that forms follicles (hematoxylin and eosin x85).

of varying quantities and may show marked hyperplasia, even to the formation of germinal centers. The treatment is surgical excision. They recur only if incompletely removed. This tumor is also somewhat radio-sensitive.

Cystic Hygroma

Cystic hygroma is a congenital tumor usually found in the region of the anterior triangle of the neck, but is occasionally seen in the thoracic wall or in the axilla. The growth may become quite bulky. Histologically the tumor is a lymphangioma. It tends to undergo spontaneous regression before adult life is reached and is also subject to repeated bouts of inflammation. These neoplasms are treated by irradiation.

Cancer of the Face

Bell⁴ stated that about 90 per cent of all carcinomas of the skin develop on the face and neck, that is, the exposed portions of the body. In surgical clinics squamous-cell epithelioma are more frequent than the

basal-cell variety; however, in dermatology clinics the reverse is true. In general, squamous-cell carcinomas are much more malignant than basal-cell carcinomas, but some squamous-cell tumors are very slowly growing and some basal-cell carcinomas, especially those of the eyelids, may infiltrate rapidly. The location of the lesion is often helpful in distinguishing clinically between the two tumors, those on the eyelid and nose usually being of the basal-cell variety. The microscopic appearance of these two tumors is well known and need not be stressed here. It is of importance, though, to realize that there exists a mixed group, that is, tumors containing both basal-cell and squamous-cell elements. These tumors occasionally metastasize; however, a pure basal-cell carcinoma does not.

It is interesting to speculate as to the origin of basal-cell epitheliomas. One school developed a theory that they originate from the basal layer of epidermis. Another school has developed a theory that they originate from hair follicles. It would seem most likely that they develop from epithelium which is capable of forming hair follicles since they can frequently be traced to the basal layer of the epidermis. We have never seen them on skin where hair follicles are not found; namely, the palms of the hands, the soles of the feet and the surfaces of mucous membrane. It has been suggested that the squamous-like elements in certain basal-cell carcinomas are attempts at the formation of hair matrices.

The diagnosis of carcinoma of the skin can be made clinically in about 80 to 90 per cent of the cases. In spite of this a biopsy should always be performed to confirm the diagnosis histologically. The biopsy specimen should be taken from the clean edge of the lesion. It should be deep and should also include a portion of the adjacent normal skin.

Ackerman and del Regato⁵ have mentioned that carcinomas of the skin are theoretically curable by a variety of therapeutic means, such as escharotics, cryotherapy, electrocoagulation, cautery excisions, scalpel excisions, curietherapy and roentgen therapy. They further have stressed that injudicious use of some of these methods is probably responsible for the frequent failures. The general

consensus is that carcinoma of the skin is probably best treated either by surgical excision or by irradiation, the choice of therapy being dependent upon location of the lesion, degree of extension, previous therapy and the experience of the therapist.

Carcinomas of the skin have the best prognosis of all malignant tumors. The presence of metastatic lymph nodes lessens the prognosis, and recurrences following inadequate excision or irradiation have the poorest prognosis.

Melano-epithelioma

Ackerman,⁶ in a recent article, reported the clinical and pathologic features of 75 cases of malignant melanoma of the skin. He found 12 cases in approximately 22,000 necropsies. They are slightly more common in males than females (4:3). About 65 per cent of the cases had a pre-existing mole, and in 25 per cent of this group the mole had been present since birth. Malignant melanoma is the most common malignant tumor of the lower extremities.

Of particular clinical interest is the fact that moles usually do not undergo malignant changes during childhood or adolescence. Some of the first signs indicative of malignant changes are increase in size, darkening or pigmentation, surface ulceration and extension into surrounding tissue. It is thought that trauma may play an important etiologic role in the development of malignant changes. Therefore moles located in areas of constant irritation should probably be removed as a prophylactic measure. These sites are the face (shaving), neck (collar) and abdomen (belt). Moles should be excised by sharp dissection, so that adequate histologic examination can be made.

Treatment of malignant melanomas is surgical. It consists of radical excision of the lesion and radical dissection of the predictable or known lymph node-bearing areas or both. These tumors are very radioresistant and consequently irradiation is not indicated as a primary therapeutic procedure. Irradiation is also of doubtful value as a palliative measure, for Ackerman noted in treating some of his patients that although there was marked local regression in some cases, this was followed by increased growth of the tumor, distant metastatic lesions and death. Some of the reported cures of melano-

epitheliomas by irradiation did not have pathologic confirmation, and it is likely that these lesions were probably not melanoepitheliomas. The over-all prognosis is poor. Ackerman reported a five-year survival rate of 19 per cent for all patients. However, about 50 per cent of the patients of his series were operable and for these the outlook is much more favorable with a five-year survival rate of 38 per cent.

Tumors of the Nose and Paranasal Sinuses

The most common tumor of the nose and paranasal sinuses is the ordinary polyp, which is inflammatory in origin rather than neoplastic. Other benign tumors of this region are usually of connective tissue origin. Of these the most significant is the fibroma seen in the nasal cavity. These may grow to very large size and produce marked obstruction of the nasal passages. They are usually found in the adolescent age group. The tumor because of its large size may cause pressure necrosis of the adjacent bony structures. Histologically the tumor is composed of vascular connective tissue. The treatment is excision and fulguration.

The malignant tumors are, in a majority of cases, squamous-cell epitheliomas. However, about one third are adenocarcinomas or sarcomas of the various types, and will be further discussed along with the tumors of the salivary glands. The commonest sinuses to be involved are the antrums. However, it is particularly interesting to note that a tumor involving the frontal sinuses is the meningioma. These slowly growing meningioma. These slowly growing meningeal tumors erode the bone and invade the sinus cavity. New and Erich⁷ use Broders' grading of the squamous-cell epitheliomas as a guide to therapy. In general, the low-grade lesions are radioresistant and are consequently treated with surgical diathermy whereas the high-grade lesions are radiosensitive and are treated by irradiation.

Tumors of the Nasopharynx

Polyps and squamous-cell epitheliomas of the nasopharynx are similar pathologically to those of the nose and paranasal sinuses. Of particular interest, however, in this region is the lympho-epithelioma. This tumor constitutes about 10 per cent of the malignant lesions of the nasopharynx. The chief interest is concerned with the pathogenesis

of the tumor, that is, the cell type or origin. The tumor occurs in the region of the tonsil, the posterior nares, the orifices of the eustachian tubes and the roof of the pharynx. The epithelium of these parts may be squamous or transitional. Lympho-epithelioma, we believe, is a highly malignant carcinoma originating from this epithelium; it imitates a lymphosarcoma (fig. 2). Of particular clinical

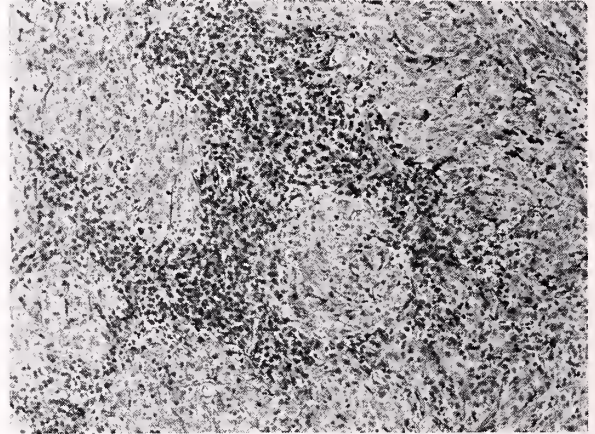


Fig. 2. Lympho-epithelioma of the nasopharynx. The pale cells are malignant while the small dark cells are normal lymphocytes. This is a type of carcinoma (heatoxylin and eosin x135).

cal interest is the fact that these tumors grow slowly at the primary site, but metastasize early to one or both sides of the neck. They are extremely radiosensitive and the five-year survival rate following irradiation varies from 25 to 42 per cent. Since the so-called lympho-epithelioma is a carcinoma it is probably of no more than passing interest to retain the term "lympho-epithelioma." The tumor should be grouped with the carcinomas.

Tumors of the Larynx

Vocal Nodules, "Singers's Nodes," "Screamer's Nodes."—

Small nodular growths may occur in the true vocal cords. These are frequently found in singers, public speakers, school teachers, and so forth, and consequently some relationship to excessive or unnatural use of the voice, or both, is suggested. They are small, elevated and usually bilateral. Histologically, they are composed of a loose vascular, organizing, inflammatory fibrous connective tissue covered by a thickened epithelium. Chevalier L. Jackson⁸ has recommended surgical removal under direct vision so that the node may be removed clearly without damage to the cordal margin.

Carcinoma of the larynx comprises about 2 per cent of all malignant lesions and about 95 per cent occur in males. They are anatomically divided into two groups: the intrinsic (vocal cords, ventricles and subglottic regions) and the extrinsic (upper surface of the ventricular bands, epiglottis or its appendages and the postcricoid region). Their respective incidences are approximately equal. They are almost always squamous-cell epitheliomas and the malignancy is usually grade 2 or 3. The first symptom of the intrinsic type is, in most cases, hoarseness. In the extrinsic variety dysphagia of varying degrees is usually the first symptom; however, in 20 per cent of the extrinsic lesions a metastatic node is the first symptom and in this group there may be intractable pain due to compression of cranial nerves.

Carcinomas of the larynx may also be considered on the basis of those which originate from leukoplakia and those which do not. Generally speaking, those carcinomas associated with leukoplakia are less malignant than those unassociated with leukoplakia.

About one third are operable, and in this group the survival rate is higher than that following irradiation. Martin^{9, 10} has stated that if a lesion of the vocal cord is 1.0 cm. or less in diameter, surgical treatment brings a five-year survival rate of 92 per cent. About two thirds must be irradiated and the cure rate is very low. The complications of the intensive irradiation necessary are the usual causes of death.

Tumors of the Mouth (Includes Lips, Mucous Membranes, Tongue and Floor of Mouth)

Cancer of the mouth constitutes about 4 per cent of all human cancer. As elsewhere along the gastro-intestinal tract there is a marked predominance (85 per cent) of the lesion in males. About 90 per cent of these lesions are squamous-cell epitheliomas. Carcinoma of the lower lip constitutes about one third of all carcinomas of the skin. The malignancy of most of the lesions of the lip and anterior two thirds of the tongue is usually grade 1 or 2 whereas the malignancy of most of those of the posterior one third of the tongue is grade 3 or 4.

Leukoplakia in this region is definitely associated with development of squamous-cell

carcinoma. Grossly, the affected mucous membrane is whitish and thickened. The whitish appearance is the result of the development of a thick cornified anuclear layer on the surface; this is normally not present on a mucous membrane. The thickening is the result of epithelial hyperplasia and an inflammatory infiltration beneath the epithelium (fig. 3). Carcinoma, when it occurs,

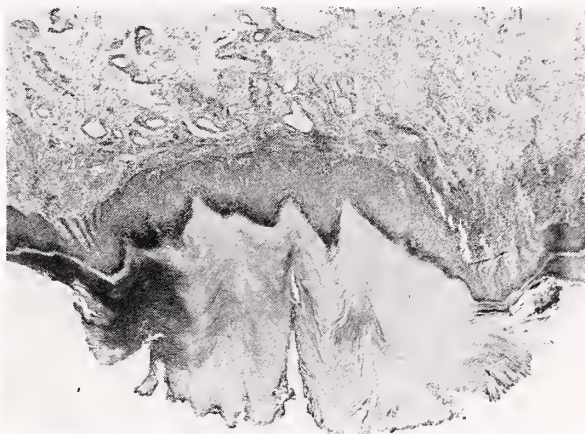


Fig. 3. Leukoplakia of the lip. Note the cornified surface layer which is normally absent (hematoxylin and eosin x25).

develops from the hyperplastic epithelium. Leukoplakia tends to develop in multiple areas. Since such lesions are precancerous, these patients should have periodic investigations with eradication of the leukoplakia as it appears.

Martin has stressed the important fact that carcinomas of this region are chronic and progressive. If patients can recall that the lesion has been present for several weeks or months and is steadily increasing in size, the diagnosis is most likely to be a malignant tumor. He also stressed that failure to establish such a history does not rule out malignancy. This can be attributed to the fact that certain parts of the mouth are comparatively insensitive and the lesion may become large before being noticed. Adequate biopsy specimens should be sent to a pathologist for definite diagnosis. Treatment of cancer of the mouth is by surgical removal or destruction by irradiation. These may be used alone or in combination; the site and the extent of the lesion are the determining factors. The prognosis also varies with the site and the extent of the lesion. Martin has reported the following five-year survival rates in carcinoma of the mouth: lip, 70 per cent; tongue, 28 per cent; floor of mouth, 25

per cent; mucosa of cheek, 29 per cent; palate, 31 per cent; gums, 26 per cent, and tonsil, 18 per cent.

Epulis

An epulis is a benign tumor occurring in children and young adults. It arises from the periostum of the deciduous teeth and usually develops between or by the side of the teeth. Only rarely does it develop in relation to the molars. The growth is outward and the tumor presents itself clinically as a broad-based elevated firm mass. The overlying epithelium is usually intact. Microscopic examination reveals multinucleated giant cells in a fibrous tissue stroma. The number of giant cells is variable; however, in the typical case they are numerous. The tumor does not invade the bone. Austin¹¹ has recommended the surgical removal of the tumor together with removal of the teeth in the region and curettement of the overlying bony processes. The patient should be observed frequently for a considerable period and if the growth recurs, it should be excised again and cautery applied.

There is a type of epulis in which no giant cells are seen. This type, often called the fibrous type, does not respond to excision as readily as does the giant-cell type.

Adamantinoma

Adamantinoma is a fairly common tumor of the jaw. It is more common in the lower jaw where it usually occurs in relation to unerupted or malerupted teeth, especially the molars and canines. The tumor grows slowly and causes expansion of the jaw until only a mere shell of bone remains. Cyst formation may occur. This tumor, when located in the jaw, is usually benign; however, when found in the tibia it is frequently malignant and metastasizing. Histologically, a wide variation is presented. Treatment is surgical removal.

Tumors of the Pharyngeal Wall

Carcinoma of the pharyngeal wall comprises about 0.5 per cent of all carcinomas and about 3 per cent of the carcinomas found in the upper part of the gastro-intestinal and respiratory tracts. In this country about 85 per cent of cases occur in males. However, in Scandinavia about 60 per cent are found in females. In the United States the chronic pharyngeal inflammation of Plummer-Vinson's disease is thought to be an etiologic

factor. About 90 per cent of these malignant tumors are squamous-cell epitheliomas and in more than 50 per cent the malignancy is grade 3 or 4. These tumors may produce relatively few symptoms until the lesion is of considerable magnitude and then the most common symptom is dysphagia of varying degrees. Often the presenting symptom may be metastasis to the cervical nodes. Because of the location and the usual extent of the lesion at the time of diagnosis, surgical therapy is usually of little avail; however, a few large cancer centers are treating these lesions by radical operation. Irradiation therapy produces a five-year survival rate of about 5 per cent.

Carcinoma of the Esophagus

Sweet¹² has stated that carcinoma of the esophagus is a common disease and that at Massachusetts General Hospital it is two thirds as common as carcinoma of the stomach. About 80 per cent of these tumors occur in males. They are usually of the squamous-cell variety and most of them are rapid growing. Seventy per cent of the patients whose lesions are operable already have involvement of the regional nodes; therefore early diagnosis is of extreme importance. The first symptom is usually dysphagia, often intermittent, dependent upon the type of food. About the only other symptom of importance is pain. When carcinoma of the esophagus is suspected, roentgenologic examination will usually demonstrate the lesion which produces an irregular filling defect usually annular in extent, involving the esophagus at whatever level the lesion is located. Also indicated is esophagoscopy examination; the lesion can be directly visualized and tissue obtained for pathologic examination. The only hope of cure lies in early operation by a skilled surgeon. Sweet's results showed that 39.1 per cent of those who survived the operation were alive three or more years later. He also recommended the procedure as a palliative form of treatment.

Tumors of the Lymph Nodes

If enlargement of lymph nodes is the result of malignancy, it may be primary (malignant lymphomas) or secondary (metastatic carcinoma). So far as the metastatic lesions are concerned the most important finding is asymmetry of the nodes, and if symmetric

enlargement is found, it is metastatic carcinoma until proved otherwise. Metastatic lesions in the upper cervical region are usually due to carcinoma in the region of the mouth, the middle cervical nodes being involved in carcinoma of the larynx and thyroid; Supraclavicular nodal involvement is suggestive of lesions below the clavicle. The supraclavicular nodes are most commonly involved from a primary lesion in the stomach or lung. Whenever metastatic lesions in the nodes are suspected it is recommended that a thorough search for the primary lesion be carried out before biopsy is instituted.

The malignant lymphomas, especially Hodgkin's disease, sometimes first present themselves as involvement of the nodes of the neck. Differential diagnosis from metastatic involvement may often be extremely difficult even though the lymphomas tend to be larger and to grow faster. There is, at present, no unanimity in regard to classification of the malignant lymphomas. However, modifications of Gall and Mallory's classification¹³ are quite workable. One such convenient modification is (1) lymphosarcoma, (2) reticulum-cell sarcoma, (3) Hodgkin's disease and (4) giant follicular lymphoma (Brill-Symmers disease). Treatment of malignant lymphomas is irradiation which brings about a five-year survival rate of 52 per cent for an over-all picture. Some success is also reported with the use of the nitrogen mustards. However, in so far as general usage, is concerned, these drugs can be considered to be in the experimental stage. Their action and effect are similar to those of irradiation. They can sometimes be used to advantage as an alternative method when degrees of radioresistance are encountered.

Tumors of the Salivary Glands

The most common tumors of the salivary glands are the so-called mixed tumors. They occur in the parotid, submaxillary and sublingual salivary glands, but also are seen in the mouth, throat, upper lips and lacrimal glands. Davis¹⁴ has defined mixed tumors as neoplasms of the orofacial region comprised of stroma of mucoid connective tissue often undergoing cartilaginous transformation with groups of epithelial cells which may be either glandular or squamous. Because of a distinct variation in both the

histologic picture and clinical course this group must be further subdivided into two types: (1) the typical mixed tumors (fig. 4) and (2) the cylindroma type of mixed tumor (fig. 5). Stein and Geschickter¹⁵ reported the

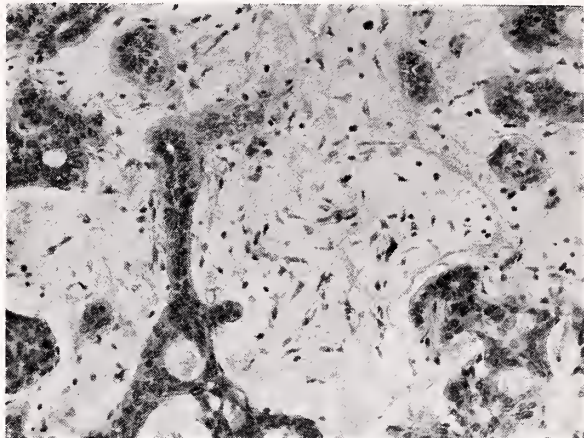


Fig. 4. Mixed tumor of the parotid gland. Note the glandular epithelial elements and mucoid connective tissue (hematoxylin and eosin x200).

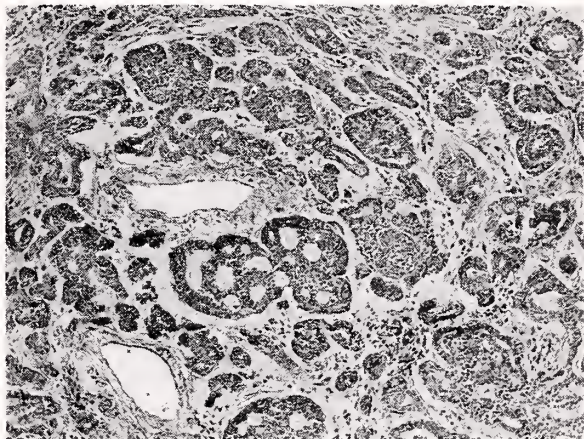


Fig. 5. Cylindroma of the parotid gland. The glands have irregular spaces in them suggestive of Swiss cheese. There is a mucoid connective tissue between the epithelial elements (hematoxylin and eosin x85).

incidence of the cylindroma type in parotid tumors as 17.4 per cent. Dockerty and Mayo¹⁶ in a group of 81 tumors of the submaxillary gland reported an incidence of 18.5 per cent of the cylindroma type. Histologically the cylindroma type of mixed tumor is composed of cylinders of epithelial cells in a connective tissue matrix. Enclosed within the cylinders of epithelial cells are cystic spaces filled with a mucoid material. There is a marked tendency to involvement of the perineural lymphatics. Clinically the cylindroma type offers a poor prognosis since there is a five-year survival rate of only

about 50 per cent. Simple enucleation is followed by recurrence in about 85 per cent of cases whereas after radical resection, the recurrence rate drops to about 40 per cent. Death is due to widespread metastasis. In the remaining much larger group, the typical mixed tumors, there is a much better outlook. A tumor of this type is slow growing. It may recur locally but rarely metastasizes. Complete surgical excision is the recommended form of therapy. Neither type is usually radiosensitive.

As previously mentioned, these tumors also occur in the upper lip, mouth, throat and lacrimal glands. McDonald and Havens¹⁷ made a study of a large group (339 cases) of malignant glandular tumors of this region. The relative incidence of sites of origin within this group were palate, 86 cases; nasal cavity, 66 cases; pharynx, 43 cases; antrums, 29 cases; cheek, 26 cases; and lips, 21 cases. These tumors were classified on a histologic basis as cylindromas, mixed tumors, papillary adenocarcinomas and solid adenocarcinomas. It is particularly interesting to note that in contrast to tumors in the salivary glands and elsewhere, the cylindroma type of mixed tumor far outnumbered (31:7) the typical mixed tumor when it occurred in the nasal cavity and the antrums. When comparing the prognosis it was found that the papillary adenocarcinoma, although histologically appearing relatively benign, gave the poorest prognosis. The prognosis in respect to the remaining lesions varied from poorest to best, in this order: cylindromas, solid adenocarcinomas and typical mixed tumors.

A rather confusing and poorly defined group of salivary tumors consists of so-called Mikulicz disease and Mikulicz syndrome. Both of these conditions are characterized clinically by symmetric enlargement of the salivary glands with or without similar involvement of the lacrimal glands. However, one side may become involved before the other. Histologically in both entities there is a profuse overgrowth of lymphocytes with only scattered remnants of glandular tissue remaining. It is not possible for the pathologist to distinguish between the two by the microscopic picture presented in these tumors. The distinction must be made by clinical and laboratory investigation of the reticulo-endothelial system, for when the in-

volvement of these glands is but a part of a generalized reticulo-endothelial malignant disease such as leukemia or malignant lymphoma then the term "Mikulicz syndrome" is applied. However, if a thorough clinical and laboratory study of the reticulo-endothelial system reveals no evidence that system is involved then the term "Mikulicz disease" is applicable. The condition in the latter instance is a benign localized lesion of unknown cause and responds well to small doses of irradiation.

Tumors of the Thyroid

Benign enlargements of the thyroid had best be considered as metabolic diseases and will not be discussed further. Carcinoma of the thyroid comprises about 0.5 per cent of all malignant tumors and is found in females in about 65 per cent of the cases. About half of the carcinomas will arise in adenomas. Histologically there are three varieties: (1) papillary adenocarcinoma, (2) nonpapillary adenocarcinoma in adenoma and (3) diffuse carcinomas. By far the most common is the papillary adenocarcinoma. These are very slowly growing tumors, and this probably accounts for the fact that only about 50 per cent are diagnosed prior to histologic examination. A papillary carcinoma may arise in a pre-existing adenoma but many do not. The first sign is usually a lump in the thyroid gland. The so-called lateral aberrant thyroid is, in our experience, a metastatic papillary carcinoma of a cervical lymph node in which the primary lesion remains small and can be found in the lobe of the thyroid on the side of the metastasis (fig. 6). Papillary



Fig. 6. Cervical lymph node showing papillary carcinoma which was primary in the thyroid gland. The portion of the node to the right is replaced with carcinoma (hematoxylin and eosin x8).

carcinoma frequently occurs in a younger age group. Because of the slow growth and radiosensitivity of lesions in this group of neoplasms, combined surgical and irradiation therapy should be employed. The five-year survival rate is excellent.

There is considerable variation among pathologists as to what constitutes a malignant adenoma of the thyroid. To some this diagnosis cannot be made without evidence of invasion of the capsular veins. Others have various histologic criteria. Local surgical excision is the only curative procedure. Nodal dissection is worthless since this neoplasm spreads venously and not via lymphatics. These tumors are radioresistant.

Diffuse solid adenocarcinoma is very rare. Much of the thyroid is involved. There is early metastasis and curative excisional therapy is to no avail.

Parathyroid Adenomas

Tumors of the parathyroid are of interest because of their physiologic effect on calcium metabolism. Until a relatively short time ago adenomas of the parathyroid were considered to be quite rare. However, with increased knowledge and greater interest arising from this knowledge, these lesions are now being recognized in their earlier stages. Frequently the diagnosis is made without the severe manifestations of generalized osteitis fibrosa being present. The findings of hyperparathyroidism can be due to either an adenoma or a generalized hyperplasia of the parathyroids. The relative incidence of adenoma versus hyperplasia is about 6 or 8:1. The tumors vary in size from 1 to 10 cm. with most of them being quite small. Some surgeons have found that only about 10 per cent are palpable; thus size alone is of little value in the diagnosis. Lahey has stated that one should be suspicious of hyperparathyroidism when evidence of osteoporosis is found on roentgenologic examination. Other clinical evidences which should bring suspicion are spontaneous fractures, round back with collapsed vertebra, and finally, renal stones or calcification in the kidney. The diagnosis is made on the basis of high values for blood calcium, low values for blood phosphorous, increased output of calcium and phosphorous in urine and an increase in alkaline serum phosphatase. In suspicious cases an early and relatively easy

test as relates to calcium balance is the Sulzowitch test for urinary calcium. Details for this procedure may be found in any standard textbook of clinical pathology.

The treatment is surgical removal, and considerable skill and experience are usually necessary in what would seem to be a relatively simple procedure. Of special importance in surgical removal of adenoma is to recognize that remaining parathyroids have undergone a disuse atrophy, and in the immediate postoperative period these patients must be watched closely; parathyroid hormone is frequently necessary to prevent tetany. After a short compensatory period the remaining glands adequately supply the necessary parathyroid hormone. These tumors may appear malignant histologically; however, only in a few rare instances are there authentic cases in which metastasis has occurred.

Tumors of the Carotid Body

Tumors of the carotid body are very rare and constitute only about 1 per cent of all neoplasms of the neck. They are slowly growing tumors, located below the angle of the jaw. They pursue a chronic, relatively benign course without distant metastasis. Since surgical removal is hazardous, these tumors should be left alone if asymptomatic. Martin has stated that ligation of the carotid artery in this region is followed by a 50 per cent operative mortality. The dangers are vastly greater in patients more than 40 years of age, and hemiplegia often follows in this older age group. When the tumor is symptomatic, that is, when it is painful or when symptoms due to interference of cerebral circulation are present, it may become necessary to remove the tumor surgically. If it is the older age group, and ligation of the carotid artery seems inadvisable, then removal of most of the tumor but leaving the carotid artery intact is indicated. This tumor is not radiosensitive.

Chordoma

Chordoma is another rare tumor; reports of only about 250 to 300 cases have been recorded in the literature. It is believed to arise from remnants of the notochord. Most of these tumors occur in the sacral region but about 20 to 30 per cent occur in the sphenoccipital region. They are usually

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Pregnancy in the Course of Hodgkins Disease

by John E. Summers, M.D.,* and E. H. Shaw, Ph.D.**
Vermillion, South Dakota

In 1945 Gilbert¹ published a review of Hodgkins disease complicated by pregnancy. This report included his personal series which consisted of six mothers and ten children. Gilbert also reviewed the thesis of Fabian; a monograph of all of the cases of Hodgkins disease complicated by pregnancy reported up to 1943.

According to Gilbert¹ Fabian's study of the case histories of these patients revealed the following facts:

1. There were 40 pregnancies which occurred in granulomatous mothers previously treated by roentgen therapy.
2. In 19 of these cases the course of the granulomatosis was chronic with acute exacerbations.
3. In 20 cases the course of the granulomatosis was chronic without acute exacerbations.
4. One pregnancy aborted.
5. The pregnancy was interrupted in 3 instances.
6. 36 pregnancies were well carried to term.

As for the course of the mother during pregnancy:

1. In 12 patients the disease (Hodgkins) was aggravated.
2. In 21 patients the disease was not affected.
3. In 3 mothers the course of the granulomatosis was favorably affected by the pregnancy.

Concerning the course of the mother after pregnancy:

1. In 15 cases the Hodgkins Disease was aggravated.
2. In 19 patients the disease was unchanged.
3. Two patients improved after pregnancy.

In 19 patients of the 40 pregnancies, the granulomatosis appeared first shortly before or during pregnancy. In 12 of these 19 the

disease first became evident during pregnancy. Of these 12 mothers, 7 died shortly after pregnancy, while of the 7 who contracted the disease shortly before pregnancy, none have died.

Concerning the infants born of granulomatous mothers and the subsequent fate of the mothers:

1. 36 healthy infants were born.
2. Three of these died in the neonatal period. One of these died of generalized granulomatosis. This is the only reported instance where the child born of a mother with Hodgkins disease has developed Hodgkins disease itself.
3. 8 children have been lost track of.
4. 25 children were reexamined in 1942 (the ages of only 19 of the 25 children stated).
5. These 25 infants were born by 20 mothers with Hodgkins disease.
6. Of the 20 mothers 10 were dead by 1942.
7. Of the 10 mothers dead by 1942, 9 deaths occurred shortly after delivery, all nine patients having developed Hodgkins disease during pregnancy.

To the 36 infants born of granulomatous mothers collected by Fabian, Gilbert¹ added; another case of his own; 2 infants reported by Frommolt; and 3 infants (ages, 17, 8 and 4 years respt.) reported by Luden. Of Luden's patients, 2 mothers died 3 and 9 years, respt., after delivery and one was alive 4 years after delivery.

Perrier, in 1945,² reported 6 infants born of 5 granulomatous mothers.

Costa and associated³ reported a case in 1945.

Summers and Reid⁴ have reported one patient with Hodgkins disease who has had two successful pregnancies. This makes a total of 51 infants born by mothers with Hodgkins disease so far reported in the literature.

A summary of Gilbert's experience with 10 infants born by 6 mothers with Hodgkins

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disease is shown in chart 1. Perrier's observations on 6 infants born by 5 mothers with Hodgkins disease is summarized in chart 2.

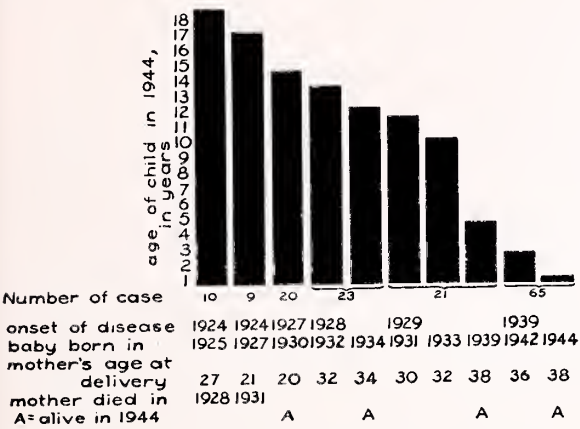


Fig. 1. Chart summarizing Gilbert's personal experience with 10 infants born by 6 mothers with Hodgkins disease. The oldest child is 18 years of age, the youngest, a few months.

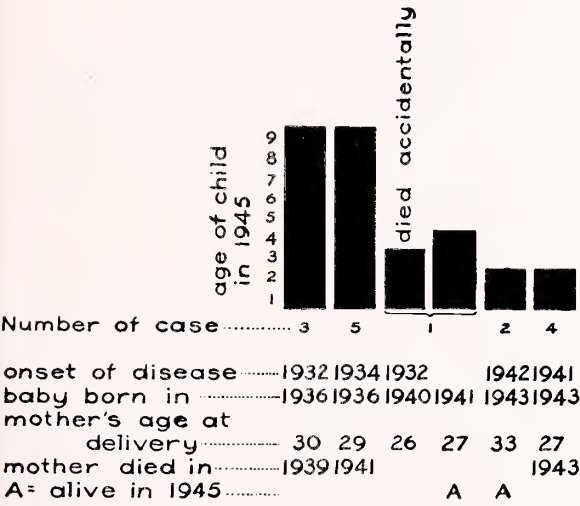


Fig. 2. Chart summarizing Perrier's personal experiences with 6 infants born by 5 mothers with Hodgkins disease. The oldest child is 9 years of age, the youngest, 2 years.

From his extensive experience Gilbert concluded that the pregnancy and the post-partum course of the granulomatous patient develops normally if the patient has contracted the disease prior to the onset of pregnancy, and if she has had a satisfactory response to adequate roentgen therapy, the pregnancy occurring during a remission in the disease.

Gilbert states: "If a normal pregnancy occurs in a patient during a remission in the

granulomatosis after successful roentgen therapy, there is no question of interrupting the pregnancy - that would do more harm than good. If the disease appears first just before or during pregnancy, no rule can be given. The problem depends upon the type of case, but one should recall that the gravity of the disease depends, above all else, upon its embryological type. Pregnancy can be a factor of aggravation but one can say as much or perhaps more for interruption of the pregnancy. An expectant attitude with adequate but careful roentgen therapy often allows the infant, if not the mother, to develop without recognizable injury, provided one abstains from irradiating the embryo during the first six months of the pregnancy. Up to the present time, my 10 infants, born of six granulomatous mothers during a free remission following roentgen therapy, observed over a 20 year period, are all living and healthy. They total 110 years of age - the oldest is 18, another 17, etc. We will soon be permitted to witness a second gen-



Fig. 3. Photograph of the patient and her two children taken in Feb., 1948. The mother first showed clinical evidence of Hodgkins disease in Dec., 1943. The first baby, a 7 pound baby girl, was born on Aug. 23, 1946. The second baby, a 3 pound, 15½ oz. baby boy, was born on June 3, 1947.

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PRESIDENT'S PAGE

L. J. Pankow, M.D.

November Message

No more inspirational message can be written for this page than the story of Doctor Bob Quinn, and the recently demonstrated love, esteem and affection that his families in Burke, S. Dak. feel for him. The Dr. Quinn story and the demonstration are so interrelated that it is beyond my ability to separate them. It starts way back about 1913 when Bob was a young man, and first came to practice in the place that was to be his home ever since. One wonders what Bob thought of Burke, that day, and one wonders

what Burke thought of Bob. Knowing the Quinn proclivity to be crusty and testy, one can't help but wonder how long it took his people to learn that the crust was only a sham to cover up a too sensitive and a completely lovable personality. I don't know how long it took, but I know that it did happen, and I know how completely his fellow citizens love and revere him today. Believe me, the little children of Burke say their prayers at night to God and Doctor Quinn.

The People of Burke learned about the annual selection of a General Practitioner of the Year by the A.M.A., and they lost no time in recommending him to our State Association; nor was it difficult for the Council to decide on him as our State Candidate for that honor. After we nominated Dr. Quinn, Burke really went all out to show the world and Doctor Bob what they really thought of him. They put on a banquet and reception over there, the other night, for him. Friends, patients and doctors from all over the country came to tell and demonstrate their feelings. There were more speeches than at a political rally. Maybe the words varied slightly in the different ones, but the tune was the same in each. That tune was one of reverence, regard and love for the Doctor who has served them so honestly, faithfully, creditably and, yes, lovingly, for the past nearly forty years. And when it was time for crusty old Doctor Bob to respond, the crust got so sort of soaked up with the emotion that is so poorly concealed, that the response was more eloquent because of it.

The facts are that Doctor Quinn has served his community according to the good old traditions of the Family Doctor. That service, coupled with the natural ability and goodness of the man has moulded a mutual respect and affection between him and his people that is beautiful. The desire to honor him and to tell the world about that honor, love and respect has resulted in an additional activity at Burke. They are creating a fund to turn over to the Endowment Corporation to establish a Chair or a series of Lectures to be named in honor of Doctor R. J. Quinn of Burke, S. Dak. Lip service alone does not satisfy them. They realize that words frequently are forgotten, but that the DEED of establishing a Memorial Fund will be a permanent declaration of their esteem.

So long as we have doctors of the calibre of Bob Quinn, and so long as we have people like the folks of Burke, we need not fear the breeding of socialistic trends in Medicine under such combinations. Those folks know what they think about their Family Doctor, and no political blandishments would sell a false bill of goods to them. They have expressed themselves in words, actions and in deeds that will live long after the present actors have walked off the stage of Life, and the good they have done will march on for all time. Would that the politicians trying to wreck the free enterprise system of Medical Practice could get well exposed to the spirit of Burke. Yes, and that our fledgeling doctors starting out in their own communities could see the worth and the satisfaction of a life such as Doctor Quinn has enjoyed, and, Please God, may enjoy for many, many years more.

God Bless you, Bob Quinn, and you, friends and Citizens of Burke, in a long continuation of a relationship between the Family Physician and his People that is as He intended it to be.

CORRECTION

In the October issue an error appeared in the presidents' message. In the next to the last paragraph of the message in which he talks of a cleavage between the specialist and the general practitioner the statement reads "So far as I am aware, there is feeling of disunity among the Doctors of South Dakota." This should read — "there is **No** feeling of disunity—"

There will be a moment of silence to commemorate the departed proof-reader. Poor soul.

EDITORIAL PAGE

THE FAREWELL STATE

I appear before you today as an ordinary citizen who is gravely concerned, and I think there are millions like me, over the direction in which this country is headed.

I believe we are interested, primarily, in a resurgence of the principles and moral attributes which carved this nation out of a wilderness and built it into a position of world leadership, judged by any standard you may care to select. If we do believe in these principles, we cannot and we must not accept socialism under the so-called welfare label.

Unfortunately all we do as businessmen is talk about the future - just talk - no action - no one seems to care. That frightens me because we don't realize we are losing our freedom.

If you want to know where we are headed, read John T. Flynn's latest book - *The Road Ahead* - a story of our creeping revolution. He proves conclusively that we in America are not following in the footsteps of Russia, but in the footsteps of England. God forbid.

I fully realize we have gone a long way down the path of the Handout State and perhaps - it is too late to shoot Santa Claus, but I do believe it is time to sober him up. And so today I am going to discuss some points around which I believe we can rally and perhaps prevent our headlong rush into socialism.

Between the great things we cannot do and the small things we will not do, the danger is that we shall do nothing.

On that premise I appear before you today in a sincere effort to arouse you to action, to urge you to recognize and understand the problem of progressive socialism which, if permitted to continue unabated, will eventually destroy our voluntary society and our free market economy.

Whether you realize it or not we are fast approaching socialization by taxation. We are just ten years behind England on

the schedule planned by the designers of confusion who are bent on destroying the competition of private ownership. We have all been very smug and complacent. We have taken our freedom for granted. We have washed our hands of so-called "dirty politics." We have buried our heads in the sand while a small minority in our midst have been steadily undermining the foundations of our freedom for half a century. It is time to raise a warning signal against the dangers of complacency, the perils of unrealism and the insecurity of following false prophets.

Such I believe is the great issue of our times, an issue that can be met, however, if courageous men and women will now uphold private enterprise against collectivism in Federal, State, and local governments. Let us restore the American incentives to work, to "have and to hold" - the old rewards for producing more and better goods. Let us put a stop to the government's use of the money of taxpayers to compete against them - yes, and above all - stop politicians buying votes with "Federal Aid" for such measures as governmental protection from the cradle to grave and socialized medicine.

Today we are witnessing a struggle between the authoritarian and the liberal concepts of life. In this struggle you have those falsely calling themselves liberals lined up on the totalitarian side. They are there because they have abandoned the philosophy of traditional liberalism, which is individual freedom, and adopted the false, fake and phony liberalism which leads in the opposite direction.

There is a sharp distinction between liberalism and the fraudulent substitute that passes for it today. One concept, the true liberal concept, is based upon the belief in the importance of the individual soul and personality. It is based upon the sound theory that the state was made to serve man, not man to serve the state. The authoritarian concept assumes that man, the individual, is

of no importance. It assumes that man, collectively, as represented by the state, the church, the labor union or other collective aggregate, alone is important. The difference, and what a great difference it is, one concept exalts man, the other debases him. If we follow these pseudo-liberals, we shall end as slaves of an authoritarian state even though it is not their goal nevertheless it is the destination toward which they are headed.

A case in point is provided by the attitude of some federal payrollers and legislators toward a more comprehensive program of social security - a plan of government guardianship for everyone from the cradle to the grave. It seems we have an unlimited supply of reformers, humanitarians and would-be-managers-in-general who have a common notion that one has a duty to society, as a special and separate thing, and that this duty consists in considering and deciding what is good for other people. In their zeal they overlook the long history of man's struggle for freedom which clearly indicates that a part of the price he must pay for it is the willingness to assume a large measure of responsibility for his own well-being. Whenever men have endeavored to transfer their responsibilities to the shoulders of other fallible men calling themselves governments, they have eventually reared a Frankenstein monster that has turned and devoured their political, intellectual and spiritual liberty. This earth was never intended to be a full and complete Utopia. The good Lord just didn't plan it that way. Didn't He say "Thou shalt earn thy bread by the sweat of thy brow." That was not a primeval curse, but a law of progress and any legislative scheme which tries to turn this law inside out will doom all to destruction. As we look back in our own history we recognize that struggle makes strength and no person's security can exceed his individual self-reliance.

Neither the insurance industry, the medical profession or business in general have been sufficiently alert to the dangers of comprehensive national social insurance. The legislative and administrative history of social insurance throughout the world shows clearly that it is impossible to accept one part of social insurance without ultimately falling prey to the whole scheme; that social

insurance insidiously pervades the entire body politic like a cancer, and that benefits bestowed as social insurance rights are purchased by surrendering human rights.

When Bismarck instituted the payroll tax and compulsory insurance, Prof. Adolph Wagner, his economic advisor, said "the plan was to raise revenue, control the people, and re-distribute income." The state was to take over control of banking, insurance, communications and utilities. The workers were to be induced to agree to compulsory taxation and bureaucratic control in return for small social insurance benefits. In other words, the state bought the workers with small bribes and seized control.

Unfortunately there are people in these United States who want to be cuddled and coddled by government - a desire which reflects a sort of delayed infantilism. They want a benevolent Uncle to build their homes, regulate their food prices, educate their children, provide their medical needs, pension them in their old age, and finally, bury them in a federally paid-for casket. There are also many person - sound citizens, trusted members of the community - who believe that a "little social security" like a "little inflation" is good for the country. But the question arises whether one can take a "little social security" without desiring larger amounts. The trouble with social security is that small doses develop an insatiable craving for larger doses. No social security program, however undesirable, has failed to expand, and in its expansion it penetrates the entire economy ever more deeply.

Defenders of the handout state rely heavily upon a comparison of today's "welfare benefits" to the government land grants once given to railroad builders and to the early protective tariff laws. This proves, they say, that objections come only when the "propertied classes" are not the beneficiaries of the handout.

The government wisely shared in the cost of transcontinental transportation because of the sound belief that America would prosper in direct proportion to its spreading of transportation facilities. Some backward nations, notably Russia, have never made this discovery. The early tariff laws were passed when infant American industries needed protection against foreign competi-

tion. Industrial development was essential to America's program. It meant increased employment and the worker had just as great a stake in protection against cheap foreign labor as did the owner of the factory. No one cried "handout" when the government opened vast areas to homesteading—acres for the "little fellow." They got, just as did the railroads and industry, a chance to build something, and the whole country is richer for their efforts.

Ever since the adoption of the Social Security Act the strategy of the Federal Government and of non-federal advisors has been a concerted drive to extend the coverage to nearly all of the population, to increase the tax rate and taxable wage base, and to increase the benefits.

At the present time in Congress before the Senate we have House Bill 6000. This bill was rushed through and passed by the Lower House last October under the whip of the administration forces, by gag rule which outlawed any amendments from the floor during debates. This proposal is of the greatest importance to every man, woman and child in the country and it should receive special consideration from the business and professional groups due to its probable impact on our economy.

The bill is a 201 page document. Briefly it proposes to (1) bring some 11 million new persons under Old-Age and Survivors Insurance coverage - self-employed, domestic servants, salesmen and others. By some peculiar twist of the imagination - perhaps political expediency - farmers, doctors and lawyers are excluded for the present, but they will not escape for long.

(2) The existing \$3000 wage base would be increased to \$3600.

(3) The measure contains a provision for benefits to all persons who might become permanently and totally disabled. Estimate if you can the administrative difficulties and the eventual cost. Life insurance companies covered that hazard over 30 years ago but were forced to take it off the market in 1931 due principally to the large number of phony claims.

(4) Average increase in benefits about 70%.

(5) Lump-sum death benefit for all insured deaths and

(6) Increase in the amount any beneficiary may earn without loss of benefits from \$14.99 per month to \$50 per month.

Since there is no such thing as "something for nothing" and since the Government must take from the people in order to give a part of it back - after the brokerage fee is deducted to support the bureaucracy - the tax rates are as follows and remember they apply on \$3600 of wages:

Employer & Employee		
Jointly		
Self-Employed		
Jan. 1950	- 3%	2 ¼%
1951	- 4%	3%
1960	- 5%	3 ¾%
1956	- 6%	4 ½%
1970	- 6 ½%	4 ⅞%

The estimated annual cost of the proposed program at maturity is now stated to be \$12 billion. Coupled with disability and unemployment insurance, public assistance and other proposed Governmental retirement and welfare programs the cost would bring the annual social security bill to something between \$21 and \$28 billions in 20 years. In 50 years the total would be between \$30 and \$40 billions. It does not take a Delphian oracle or a Hindu swami to recognize that the number 1 menace confronting America today is not the physical conquest by Soviet Russia; it is conquest by the idea of the super-state - all-powerful federal government which looks after, regulates and controls the life and activity of every citizen from the cradle to the grave.

The far-reaching consequences of social security are now well illustrated by its impact upon savings and investment. The status of the Old-Age and Survivors Trust Fund as of Sept. 1949 shows that taxpayers poured out nearly \$14 billion in Social Security taxes and general revenue payments in a little less than 13 years. They had a billion dollars a year less for current goods and services, for investment and savings, and for provision of their own old-age security. During those years the Government paid less than \$3 billion in benefits to the aged.

We are now operating a social security system which is a delusion and which insults the intelligence of the American people; it penalizes the thrifty and it is based on the theory that we lack the capacity to manage

our own affairs. The present system should be revised so that its operations and present and future costs be known to the people. We should therefore adopt now a true pay-as-you-go system which could be kept on a supportable basis. As it stands now, federal social security is little more than a highly complicated system of spend and tax, tax and spend.

How often do we hear and read the statement made by proponents of the Paternalistic State that our people have not protected themselves against the important hazards of life, and therefor it is the duty of the Government to compel them to do so. I believe it was Harry Hopkins who once referred to the American people "as being too damn dumb to understand." Let's look at the facts.

According to the latest reports, life insurance protection in force in private companies now exceeds \$213 billion, covering more than 80,000,000 policy owners with total assets of over \$59 billion. This record is impressive proof of the determination of a large segment of the population to make provision, in the American Way, for the future well-being of themselves and their families. Any program for social security on a broader scale should take into account the extent to which people do make their individual plans, and the broad program should not be on a basis which tends to lessen the desire or the opportunity of the individual citizen. According to the Health & Accident Underwriters Conference more than 49 million persons were covered under some form of accident and sickness insurance at the end of 1949 with a total annual premium volume exceeding \$1,171,000,000. To this may be added many more millions for hospitalization coverage through Blue Cross and protection by prepayment medical plans.

Roughly if we start with the basis of protection built up over a period of more than one hundred years by private insurance companies and organizations and add to this the savings established through savings banks, savings and loan associations, real estate, investments and by the purchase of savings bonds we can total up resources committed to the protection of our people, amounting to over three hundred billion dollars, which, I submit to you, is an amazing figure. Under our free enterprise system the people create

their own security through life and disability insurance, and at the same time provide the capital that nurtures private enterprise and raises the standard of living. That is the difference between the false security under the dead hand of bureaucracy, and real security created by a dynamic economic system.

If this social security expansion proposal, which we have been discussing, is passed by this Congress you may expect greater pressure to be exerted for the adoption of a compulsory sickness compensation and medical care program. Mr. Oscar Ewing, the F.S.A. boys, and other advocates have been beating the drums for such a plan some time and they have been subjecting the public to a barrage of twisted facts which distort the situation. They wish to destroy the most successful medical system of the world has ever seen, and substitute for it a system that has failed everywhere else. They fail to understand that you cannot legislate good health into being anymore than you could create temperance by the Volstead Act.

For example, the Ewing Report asserts that we now have the knowledge to "prevent" 325,000 deaths every year, and it implies that only the negligence and backwardness of the medical profession stand in the way. We would all like to "prevent" death if we could. But unfortunately, the government is twisting figures in this kind of argument. No one can "prevent" death. The best the medical profession can ever do is to postpone death—give us more years to live. And this is exactly what the medical profession has been doing. Twenty-five years ago, a newborn child had an average life expectancy of 58 years. Today, it has risen to 68 years. In 1933, the rate of maternal deaths in childbirth was 6.2 per thousand. In 1947, just 14 years later, it had fallen to 1.3 per thousand.

Yet, in the midst of this great surge of medical progress, we are confronted with a government study which argues that medical care is not "adequate." Of course it is not. It never will be, under any system. We will always want progress beyond what we have. But so far, the evidence is strong that the medical profession is delivering the goods.

On the question of payment for medical service, the government chooses to ignore

the fact that on Jan. 1, 1950, 65,000,000 Americans were covered by insurance for hospitalization, 37,000,000 were covered for surgical care, and 15,000,000 for general medical care. All this was done voluntarily. Now, if more than one-third of the population can be covered by voluntary hospital insurance at a time when the plans are still relatively new, the government has a weak case in arguing that compulsion is the only answer. When you get right down to it, compulsion is never the best answer—for any problem. Whenever it must be adopted, it is adopted as the least of the evils. Certainly in medical care, which is a most personal sort of thing, the present evidence demonstrates that the American people are quietly and calmly making their own choice—of the voluntary way.

The American medical system was one of the wonders of this war. It was not developed or fostered by the state. It was the result of the enterprise and initiative of American doctors who, over a long period of years, were fired with the determination to make American medicine supreme. When this nation was plunged into war, our American doctors were fully equipped and prepared to cope with the gigantic task which confronted them. Why should we in this country even consider disrupting our great medical system to copy the experiments of other nations?

Now let us review a few pages of history: Bismarck, the Iron Chancellor, introduced compulsory social security in Germany, not as a social measure, but as a means by which he sought to stem the rising power of the labor party and to retain power in conservative hands. He made the state responsible for the industrial masses, protecting them against fear and want. The only price the masses seemingly had to pay was to protect the Hohenzollern dynasty against the liberal opposition, by voting the funds for a strong central government. With the introduction of State socialism, German liberalism was finished. The Government gave "benefits" to labor, industry, farming and banks. Liberal arguments could not defeat these vested interests.

In 1911, Britain adopted the German system of old-age and sickness insurance. By 1924, Britain was taking the lead in socializa-

tion, "insuring" workers against unemployment before the German Republic did. Lloyd George had Transformed the liberal Party into a middle-class Socialist Party. It was, of course, the end of the liberals. The Labor Party could promise more. As the English turned to the philosophy of statism, made glamorous by Prussian professors and generals, as government bureaus and cartels and other vested interests grew, the English lost their independence to the State.

In the last 16 years, we too have seen business, education, labor and local government in this country become accustomed to gifts from the Federal Government. As I see it, however, our danger is not from a dramatic abandonment of liberalism, but from a leaking away of principles, a little compromise, with this spending program and with that (me-too-ism) until today both political parties are as completely emmeshed in its commitments to mass supporters as were ever the most ardent New Dealers. Are we going down the same road as Germany and Great Britain?

There are some people who quibble over calling compulsory sickness insurance "socialized medicine;" some who claim that a little socialism won't hurt. Call it what you will, but you can't be a little bit socialistic anymore than you can be a little bit pregnant. Either you are or you aren't. Compulsory sickness insurance can lead to only one result: socialization of medicine and the eventual socialization of all fields of endeavor. Mr. Justice Brandies who in his day was considered an extremely liberal thinker said "experience should teach us to be most on our guard to protect liberty when the government's purposes are beneficent."

The apathy displayed by industry in dealing with our present critical situation is appalling. Business men seem to be scared stiff when they are asked to help spread the true facts about the Handout State to the masses of the people are slowly losing their freedom in the drive for artificial security, over-regulation, over-taxation and over-spending by governmental bureaucracy. It is now time to stand up, show your colors and fight it out while you still have the chance and the wherewithal to do so.

It is your job and mine and that of every other American who has a stake in this

land of ours to do his part to make the issue clear to the people of this country. We must not allow creeping socialism to come in by the back door. Socialism is a dishonest movement. It does not permit itself to be correctly labeled. Prime Minister Atlee, after making an erroneous claim for his socialization program, now admits that it has helped only the lower third of the nation. They have wrecked the nation to help the lower third that now lives below the poverty line and the upper two thirds live closer to it.

Our young folks must be taught there is no such thing as "easy money." We cannot afford to educate this generation that the best way to make money is to go into politics, marry into it, win a radio "give away," win the sweepstakes, or live on a dole. We must make it clear to the young that the opportunity to achieve success lies in more productive effort, not less - that if we are to escape the fate of Great Britain - which is mediocrity, frustration, austerity, a lower standard of living, and virtual bankruptcy - the doctors must be just as much interested in federal housing and rent control as they are in socialized medicine; insurance men must be just as much interested in government ownership of utilities as they are in social security; industrialists must be as much interested in government control of railroads as they are in free industry. In other words, if you believe in the private competitive enterprise system - the system that has made America what it is today - you must believe in it for all, not for yourself alone.

Too many of us, not just the worker and the farmer, but people like you and me, have for many years cast our vote, not from the point of view of what is best for our country, but from the point of view of where lies our self interest. We cannot expect the worker and the farmer and other pressure groups to change unless we set the example and change ourselves. Furthermore, let each of us be a committee of one and put on a sales campaign by talking to people - urge them to vote and to vote right. We've had the New Deal, now the Fair Deal, but we have never had the square deal - now it is time to have it. Express your views to your State and Federal legislators. Tell them that our American way of life is not perfect, but

until a better system is developed, we want to hold fast to our American heritage which will assure the forward march of this nation.

Happily there is beginning to be an awakening as to what is being done to the United States by the Utopians now in power. Farmers are asking if the Brannan plan does not conceal a wolf under the promised golden fleece. Insurance officials are wondering if the spurt in their business which marked the early years of the Social Security Act will continue when the Government gains the monopoly which is clearly foreshadowed. Labor is asking whether "free" benefits are worth the taxes that cut the heart out of takes-home pay. Professional groups are beginning to see that ivory towers are no protection when a country goes socialist.

When social security first made its debut it was welcomed by the insurance industry as a sort of pilot program for many uninsured and under-insured persons. Its created security has now discarded its modest role. It aspires to outright usurpation of some of the most cherished functions of private insurance.

"Social" is a word which radiates benevolence. "Security" suggests an easy chair by the fireside. Put the two words together and you get a system which is growing into a spoonfed monstrosity. The provisions of H. R. 6000 must be understood. While we worry about Russia and the cold war, we are permitting ourselves to be taken over by the socialists inside our government.

The freedom, which we enjoy, is not a permanent possession. It didn't come to us as the result of a hand-out; nor is it self-perpetuating. Freedom isn't free. It never was and never will be. It has a price tag. It requires eternal vigilance; the alertness to expose every threat, and be prepared to fight those misguided intellectuals who would deprive us of our most precious heritage. It is said "the only difference between a socialist and a communist is a hair-cut."

How can we stop this trend to socialism in the United States? Stop it at the source; and what is the source? Your state and Federal legislators. When they say "Aye" or "Nay" on a roll call vote in their respective legislative sessions, they make or defeat a law. Support those nominees, both state and national, who will place their country ahead

of their personal and political ambitions. If this country moves further to the left in the elections this Fall, the Socialistic trend will pick up momentum which will mean the nationalization of medicine, regimentation of business, higher taxes, a larger national debt and more subsidies. When that comes to pass I am afraid you and I may witness, in this land of ours, a replica of Great Britain - the disintegration of a great and glorious nation.

E. H. O'CONNOR

THE AMERICAN ACADEMY OF GENERAL PRACTICE

We can now announce that South Dakota has received its own Chapter in the National Academy of General Practice. It is therefore proper that something be stated as to the aims of the National Academy and its affiliate, the South Dakota Chapter. Being a professional and scientific organization, its primary aim is educational; the keeping of high standards in both the Art and the Practice of medicine and surgery. Many general surgeons are proud to belong. A recent young Academy member, when asked to give a definition of a general practitioner, replied: "He is a physician who practices in at least two specialties."

At first thought, the above definition seems congruous. But let the idea sink into your mind for a while. You will soon conclude that a good general practitioner is a physician broadly educated in the practice of medicine and with practical experience enough to make the performance of his duties an Art. He is not one of those who knows "more and more about less and less." But, he is one of those concerning whom Dr. Alvarez wrote, "that with his brains and with armanentarium in his grip, he can diagnose and treat 85% of the illnesses with which he comes in contact." To paraphrase, he learns "more and more about more and more." It is for these hard workers of the front echelon of the public health army that the laity have built hospitals.

The American Academy of General Practice is an organization unique in at least one respect. Membership depends on keeping up to date scientifically. A survey is made by the parent organization every three years of whether or not its members are keeping up with recent scientific advance-

ments. A minimum of three hundred hours spent in study is required. Those who refuse to attend meetings or show other evidence of study are dropped from membership. The time spent attending staff meeting counts. Credit is also acquired by attending District, State and National Meetings: definite minimum attendance at refresher courses is also required. Attendance at Clinical Conferences in recognized hospitals is also credit in the required minimum of three hundred hours. What other group or Board has a similar educational requirement?

The General Practitioners of Michigan, Illinois, Minnesota and other states have had to organize for a strong economic reason as well. In these various states, a desire of Board Members to control hospitals has become more and more plain. They think the tail should wag the dog. By uniting in staff meetings, they have passed rules, making themselves ever stronger and the general practitioner ever weaker. Attempts at limiting the general practitioner by geographical area or by artificial educational standards are numerous. Such acts have caused bitterness; and rightly so. Why should we fight for Freedom in other countries and have it curtailed at home? The public has ever been generous in giving funds for the building of General Hospitals. They want us to show no discrimination of race, color or creed. (Surely, in administering the hospitals, which we in no way own, we can be as broad minded as the donors of the institution.) Specialized hospitals, as for instance, hospitals for crippled children, are so designated when the funds are managed by the specialists in that field. Fortunately, South Dakota has been rather free from this dictatorship complex.

Our general practitioners are good men. They have spent four years in college where they earned a degree. The finest of the college students were permitted to attend medical school for four years, carrying on under a truly terrific schedule. They have at least one year internship, sometimes more. They have passed the required examinations in basic sciences. Finally, they have passed the examinations before the Board of Medical Examiners, the duly legalized body appointed for this purpose. All of the above bodies

are proper and have legal sanction. But where is the legal sanction for these intra-medical bodies? There never has been any. They have simply usurped every power which they claim to have. The Academy of General Practice recognizes these situations. Numerically we have great weight and will use it on the side of the scale where we think it belongs . . . for the General Practitioner of South Dakota.

John A. Kittelson, M.D.
Secretary Pro tem.

ARMY LOOKS FOR VOLUNTEERS

The Army currently has an immediate shortage of 1,325 physicians. These physicians must be provided very shortly if essential medical service is to be maintained. The following steps have been taken toward this objective: A limited number of World War II physicians are being called involuntarily from the Reserves. In addition to those called as individuals, Reserve medical officers assigned to Organized Reserve Corps units will be called to duty as their units are brought into active service. The professional complements of the larger medical units will not be called for initial training phases. Approximately 500 physicians with World War II service are affected by individual and unit recalls.

In addition, the Navy is making an initial recall of 570 V-12 physicians in the Naval Reserve who have not had previous active duty. These physicians will be detailed to the Army to meet current critical requirements. As soon as the Selective Service System starts meeting our requirements, Navy personnel will be returned to that service and involuntarily recalled Reserve officers will be released from duty except for those in the higher grades being utilized as specialists and in senior command assignments. Specialists cannot be released unless Public Law 779 provides replacements for them. Army requirements will be 3,200 physicians to meet current expansion plans.

From the foregoing, it is obvious that practically all physicians in category one under Public Law 779 as well as a sizable proportion of category two will be on active duty. There are certain specific advantages that will accrue to those who volunteer now rather than wait a few weeks for the draft.

First, volunteers will receive an additional \$100 per month professional pay. Second, those who volunteer and are commissioned need not register. Third, professional skills can be utilized better than under Selective Service, which makes only bulk numbers of physicians available without classification. Fourth, those who volunteer will have the satisfaction of knowing they are rendering service to their country at a time when international tensions are threatening a way of life which has made possible the development of a medical profession that embodies the highest principles and ideals of the Hippocratic oath.

Individuals can obtain information and necessary instructions for obtaining Reserve Commissions from the Office of the Unit Instructor, in the Military District in which they reside. Inquires also may be directed to the Surgeon of the Army Area in which they reside, or the Surgeon General, Department of the Army, Washington 25, D. C.

GULLIBLE'S TRAVELS

Sept. 25 - Drove to Milbank where **Drs. Gregory** and **Judge** had made arrangements for me to talk to the Commerce and Community Club.

Stayed in Watertown overnight and then appeared before the Huron Lion's Club at Noon at the request of **Dr. Wm. Saxton**.

On the 27th I drove to Yankton and sat in on preliminary discussions of local doctors on sponsorship of radio broadcasts over WNAX. **Dr. Steele** led the discussion — meeting was held at Sacred Heart Hospital.

On the 28th, I was back in Huron to attend the District Medical Society meeting where **Dr. G. J. Van Heuvelen** spoke on Medical defense against atomic attack.

Oct. 2. Drove to Chamberlain to talk to the Community Club at noon—**Mr. J. H. Drury** made the introduction. Also spent some time visiting the new hospital which was just about ready for occupancy.

Drove from Chamberlain to Parker to speak to the Lion's Club at their 6:30 P. M. meeting.

Oct. 6. - Drove to Sisseton to attend the Whetstone Valley District meeting where **Dr. Lyndon King** of Sioux Falls talked on "Dermatoses" and the grandfather of Dr.

King's children, **L. J. Pankow** made his official visitation.

On Oct. 9 - I spoke to the Cosmopolitan Club, Sioux Fall, the arrangements being made by **Francis Green** and **Dr. Pankow**.

Oct. 11 - Turned out to be a vurra' busy day. Left for Huron at 6:30 A. M. to meet with the nominating committee of the South Dakota Mental Health Association at 1:00. At ten o'clock I sat in on the Board of Directors meeting and at noon left for Sioux Falls and a few hours in the office. At 7:30 P. M., I sat on an Army Board to commission a young man in the Adjutant-General's Department. From there, I raced out to Colton to hear **Francis Case** talk in one of his campaign appearances.

The next day, I drove to Yankton State Hospital with **Drs. L. J. Pankow, Lyndon King,** and **Arnold Myrabo,** and Mrs. Foster to visit the Yankton Distret Medical Society.

Oct. 13 - A Friday at that, I drove to Vermillion to conduct a seminar for the sophomore medical students on "The Medical Society in Your Future." **Dr. Ed Shaw** made the arrangements.

Oct. 14 - Arrived late in Huron, after having a flat tire, but still in time to speak at the luncheon of the Annual Meeting of the South Dakota Society of X-ray Technicians.

CUFF NOTES TARDY ULNAR PALSY

A typical although infrequent sequella of fractures of the lateral condyle of the humerus in childhood. Averages about 20 years after fracture when ulnar nerve symptoms occur, first sensory and then motor.

If inadequately treated the fracture is apt to end in a loose fibrous union and growth at the lower end of the humerus is not balanced, and an increased carrying angle results. The angulation puts the ulnar nerve under tension which increases with flexion.

The object of treatment is to lessen the tension of the nerve. Simplest way is to transfer the ulnar nerve to the flexion side of the elbow. If done as soon as symptoms develop, irritation and irreversible changes within the nerve do not develop, and normal function returns.

Preventive measures—adequate fracture treatment would render the problem practically non-existent.

Ernest Bergman, M.D. New York. N. Y. Am. Jl. Surg. Sept. 1950

* * *

AIR TRAVEL AND THE CARDIAC PATIENT

The majority of patients who confront their physicians with the question of advisability of their flying are those whose hearts have been damaged by age or disease.

Individual resistance to altitude may be regarded as the chief problem in flying. Speed, and rapidity of ascent or descent involve no appreciable risk to the circulation in commercial air traffic. Possibly fear and apprehension are quantities to be reckoned with.

Physical and mental impairment occur at levels as low as 7,000 feet in some cases, but impairment is generally evident at levels nearer to 15,000 feet, which approximates a 12% oxygen tension in inhaled air.

Tests proved that there is a strong, augmented adjuster mechanism protecting the aged and the cardiac patient from low oxygen tension in inhaled air, and their is no valid objection to air travel in modern air vehicles for the patient suffering from heart disease.

S. H. May, M.D. New York, N. Y. Am. Heart Jl. Sept. 1950

TWO HOURS IN THE RECEPTION ROOM
AND FIFTEEN MINUTES IN THE CON-
SULTATION ROOM IS NOT CONDUCTIVE
TO SUCCESSFUL PRACTICE

* * *

DIABETES FACTS RELATED TO DIABETES DETECTION

1. Diabetes is universal and found in all races.

2. The number of diabetics in the United States has increased largely because the use of insulin has prolonged the life of the diabetic individual.

3. It is more frequent among the obese and those living on a liberal diet. It is greater among women than among men.

4. The incidence is greater among the Jewish race,

5. It is greater among married women.

6. There is a higher rate in cities.

7. It is greater among those with leisure.

8. Mortality for diabetics is increased apparently by indulgence in liquor.

FREQUENCY OF UNRINATION

Daytime frequency of urination without nocturia suggests anxiety as a cause rather than organic disease. Study the patient as a person.

Persistence of frequency after treatment may suggest that some process has not been relieved. After cystitis in the female has been treated, frequency may persist due to a urethritis, which needs dilatations at weekly intervals to be cured.

Kenneth Walker, M.D. Med. World Aug 26, 1949

—Edited by Don H. Manning, M.D.

SERVICE PROGRAM SOUTH DAKOTA DIVISION AMERICAN CANCER SOCIETY

The South Dakota Division of the American Cancer Society cannot pay for free treatment, but the State Board of Directors has made possible a service program to the cancer patient. This program is as follows:

1. Materials for bandages—cellucotton, gauze, directions etc.,—will be furnished for cancer patients, and in most cases, arrangements can be made to have the bandages made up locally according to the size and number required. Contact the local cancer chairman, or write American Cancer Society, Watertown.

2. Biopsy service and Papanicolaou smear interpretation for the indigent only. That the patient being cared for is unable to pay shall be determined by the individual physician. Payment for such requests shall be made only to certified pathologists. Blanks for this service may be secured from the American Cancer Society, Watertown.

3. Maintenance and transportation aid for the indigent cancer patient. This grant is limited to \$75.00 per requesting patient. This grant is to include only out-patient maintenance, and is **not** intended to provide hospital care or treatment. Under this grant daily maintenance is limited to \$4.00 per day. It is understood that patients receiving this type of grant will have other arrangements made for the payment of the actual medical care, such as authorization from the Board of County Commissioners or with various charity organizations. Blanks may be secured from above.

4 Loan Service Fund. The purpose of this fund is to care for those persons, who because of their disease find themselves in temporary need of financial aid. These will be people who ordinarily would not be county charges; who under ordinary circumstances would have an expected ability of repayment of such a loan. These loans are not to be considered as grants and are not to bear interest. Loan limit \$200.00 each. Blanks may be secured from above.

(Continued from Page 326)

lungs have been removed in our vicinity where no tumor could be found and two young patients failed to survive the operation. At necropsy no tumor was encountered. The same caution should be used for cell blocks of sputum. Considerable information can sometimes be obtained from lung puncture. Moreover, even biopsy diagnosis is not without its dangers since it is obviously impossible to decide operability on the basis of morphology.

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This is



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1950
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YOUR MEDICAL ASSOCIATION

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

X-RAY TECHNICIANS MEET IN HURON

The South Dakota Society of X-Ray Technicians held their Annual meeting in Huron, October 14, at the Huron Clinic and the Marvin Hughitt Hotel.

The morning session at the Clinic was taken up by a welcome from **Dr. W. H. Saxton**, president of the Clinic, and a business meeting. **Sister M. Viola** reported on the National Convention.

The noon luncheon was held in the Mezzanine Dining Room of the Marvin Hughitt where **John C. Foster**, Executive Secretary of the South Dakota State Medical Association spoke on the "Trends in Medical Economics."

The afternoon session featured a number of technical talks. **Dr. Theodore Hohm**, Huron, spoke on "Salpingograms." **Dr. Saul Friefeld**, Brookings, spoke on "Angiocardiography and Elektrokymography."

R. Schneider of the Picker X-Ray Company spoke on the "Odontoid Process" and **Dr. Hans Jacoby** presented interesting films on chest radiography.

The meeting closed with a tour of the Huron Clinic, the Tschetter & Hohm Clinic and St. John's Hospital.

NEWS NOTES

E. A. Pittenger, M.D., Aberdeen, was elected to the board of governors of the American College of Surgery at their Boston meeting on October 26. Dr. Pittenger's term will run for three years.

* * *

George T. Jordan, M.D., Vermillion, received a life membership in the American Academy of Ophthalmology and Otolaryngology at the Annual meeting in Chicago, October 11. Dr. Jordan is a charter member of the Academy and has held continuous membership for thirty years.

* * *

Quentin Scherman, M.D., Hoven, has left to take a three year fellowship at Rochester.

* * *

Gordon Q. Olsson, M.D., Scottsbluff, Nebraska, has joined the staff of the Rapid City Medical Center where he will practice pediatrics.

R. E. VanDemark, M.D. and wife, Sioux Falls, attended the meeting of the Clinical Orthopedic Society at the Shamrock Hotel, Houston, Texas, the 5th and 6th of October.

* * *

Dr. Joseph Lovering, Webster, recently became a diplomate of the American Board of Surgery.

* * *

Dr. W. C. Brinkman of Verblen has gone into practice with **Drs. Younker** and **Brauer** of Sisseton.

DR. RUDOLPH J. WIESELER

Dr. Rudolph J. Wieseler, 37, of Sioux Falls, died October 11, 1950, after a prolonged illness.

Dr. Wieseler was born at St. Helena, Nebraska, and attended Creighton University Medical School graduating in 1938. He married Louise O'Donell in 1938; he interned at St. Joseph's Hospital in Omaha and practiced at Avoca, Iowa until entering the service in 1941. Returning from service in 1946, he was on the staff of the Veteran's Administration Hospital in Sioux Falls until September, 1948, when he went into general practice in the Sioux Falls Clinic.

FUNERAL RITES HELD FOR VOLGA DOCTOR

Funeral services were held Friday Oct. 4 for Dr. E. E. Torwick, pioneer Volga physician. Dr. Torwick had been a patient at the Volga hospital for more than 10 years.

Torwick served the community of Volga for 40 years before suffering a stroke on November 7, 1940, which left him an invalid.

Services were held at the First Lutheran church, the Rev. Alden Hovda officiating. Graveside military rites were in charge of the American Legion which also provided pallbearers.

Edward E. Torwick was born in Norway October 10, 1869 and came to the United States as a young man. He was graduated from medical school in 1896. The year before coming to Volga he served with the U. S. army in Cuba.

MEDICAL SCHOOL ENROLLMENT

Out of a total enrollment of 73 students in the Medical School of the University of South Dakota, only two are from outside the state. All of this year's freshmen medical students are from South Dakota.

Registration figures this year show that there are 32 full-time freshmen, four who are part-time medical students and part-time graduate students, 30 full-time sophomore medical students and two part-time, and five medical technician students.

LEAD PHYSICIAN FETED BY LEGION

Dr. A. S. Jackson, well known northern Hills physi-

cian, received recognition Thursday evening when he was honored with a life membership in the Homestake Post of the American Legion.

Dr. Jackson has been a member of the post for 31 years and was the first commander after the organization received its charter. The sterling silver engraved card was presented to the Lead doctor by Mayor Herman Kulpac.

G. T. JORDAN, M.D. CHARTER MEMBER

Vermillion, S. Dak., Oct. - Thirty years of uninterrupted service in the American Academy of Ophthalmology and Otolaryngology will be completed at the end of this year by charter member George T. Jordan of Vermillion.

Dr. Jordan and his wife have been invited to be guests of the Academy at the annual dinner in the Palmer House at Chicago October 11. Dr. Jordan will receive a Life Fellowship in the Academy at the meeting.

The Vermillion doctor is a Professor of Ophthalmology and Otolaryngology at the University of South Dakota School of Medicine. He held a similar position at Loyola Medical college in Chicago for 25 years. He was awarded his B. S. degree at the University of South Dakota in 1900. He got his M.D. at Northwestern in 1905. He became a charter member of the Academy in 1920.

MENTAL HEALTH GROUP REELECTS DR. WATSON

E. Sheldon Watson, M.D., Brookings, was reelected

president of the South Dakota Mental Health Association at its meeting in Huron on October 11. Other medical men elected to the Board of Directors were: **Drs. H. E. Davidson**, Lead, and **W. P. Damm**, Redfield.

On the program were **Gov. George Mickelson**; **A. A. Boegler**, Sioux Falls; **H. W. Hogan, M.D.**, Redfield; **Victor Hammer**, Plankinton; **Florence Dunn, R.N.**, Pierre; and **Mrs. Cecily Glasgow**, Yankton.

PEDIATRIC GROUP MEETS IN CHICAGO

The American Academy of Pediatrics met in Chicago at the Palmer House from October 16 through 19.

Dr. Goldie Zimmerman, Sioux Falls, South Dakota State Chairman, represented South Dakota pediatricians at the meeting.

Dr. Zimmerman reports that there were over 2500 registrants which is the largest in the history of the organization. On October 14th and 15th, ten seminars on pediatric subjects were held.

The remainder of the session was taken up with round tables and the general sessions which ran concurrently. All phases of pediatric work were discussed.

Entertainment for members, guests, and ladies was provided by many of the exhibitors. This included a banquet at the Palmer House, tours of Chicago, breakfasts, cocktails, etc.

Only other South Dakota member in attendance was Dr. Will Donahoe also of Sioux Falls.

PHARMACEUTICAL DIVISION

Charles F. Van De Walle, Editor

BACK ROOM CONVENTION

By

L. S. Flanedy

Parke, Davis & Company

I am going to try and stream-line my few remarks here this afternoon. First, I would like to say the opportunity of being here and the compliment you have given me by inviting me to speak again on your program is truly appreciated.

This subject "Back Room Convention" could be given a number of names. It could be called "Trade Relations," it could be called "Customer Relations," it could be called "Clerking Training," but call it what you want to, I would like to talk for a short time about some of the neglected intangibles in the retail drug business, about some of the assets which so easily can be turned into liabilities—and to boil this down, I am going to skip through here and strike of the least important and try and lift out some of the thoughts that are most worthy of consideration.

I would like to talk to you about a part of your business, a part of your inventory, about which many assumptions have been made but about which little has been revealed in point of fact. I refer to that intangible commodity commonly called good will. I would like to ask you just what is your concept of the term good will. Just what does it mean to you and, more importantly, to your clerks? I think that we people who consider good will as an important item in our inventory, too often assume that we have a treasure of well guarded good will, when actually our treasure of well guarded good will is leaking out every minute—leaking through the little cracks made by bad handling of people.

We all are painfully aware of the short-coming of the human element in selling during the past several years; and, in fact,

An Address as delivered before the Annual Convention of the South Dakota State Pharmaceutical Association in Sioux Falls on June 14, 1950.

this situation continues to a measurable extent to this day in the character of selling and on the attitude of sales people, not peculiar, if you please, to the drug trade, but to sales people any place, especially on the retail level where it has been so evident, so highly detrimental, and has resulted in a chronic habit of what might be called "take it or leave it" selling. That kind of selling results in offense of many customers and has left an odor which will be long in dissipating. Today, there is renewed emphasis on the importance of the customer, there is renewed recognition that the customer is the important party. Too often the elimination of irritating factors in our sales effort has been attempted simply by replacement of bad-habit personnel with untrained personnel. This results in a huge turnover, a continuous job of training green help, and instability of staff which is disturbing to both the employees and to the customers whom they serve. To a gap in this vicious cycle, I would like to suggest the advisability of properly training the employees we have rather than continually facing a high turnover rate. I would like to suggest that proper training of present employees is, in the long run, more profitable than a continued search for new untrained sales people.

Let's talk about this training idea because this training idea is where the caption of these few remarks come from "Back Room Convention." The first question that logically presents itself is—who needs training? The first sales person, the first sales clerk who should trained, is the boss himself. First, because it is illogical to assume that he knows everything about selling methods; and second, because even if he does, he must acquire a totally different attitude to impart this knowledge to others than if he were

simply applying it to customers himself. The next question is: Who gives this training? The answer to that question is as varied as the size and type of the store you operate. In most cases, the logical man to give this training is the man to whom I have just referred - the boss himself.

One way in which this training can be obtained is through utilization of the courses of retail sales training which are available through the distributive education programs now operating in practically every state. One of the most serious mistakes which we retail druggists have made, in my opinion, is our failure to take advantage of the practically free training available under this distributive education program. On the other hand, our competitors — the department stores, variety stores, and many others — would jump at the chance to have their employees receive this training; but we in the drug business have, with few exceptions, noticeably failed to accept this helping hand. It is time that we did something about it, and I heartily recommend that you investigate the possibilities of obtaining this type of training for your sales people if such is available in your town. If, however, your employees do not have ready access to such help, it's up to you. Likely your help does not realize what it means to your store, or to them, to keep customers coming back. They look to you for leadership. You're the boss — but, are you the manager? Do you give your people the leadership, the counsel, the training, the guidance, that they need to become topnotch salespeople?

In our retail drug stores, both you and I have seen the type of training which clerks too often receive. It might very well be called training by reprimand. It is the sort of training which a hawk-eyed boss gives by means of a bawling-out to the clerk whom he has watched do something wrong. In some cases, I have even seen it administered in front of the customer. Such training, if you can call it training, results only in embarrassment and resentment. Most employers, more enlightened, follow the practice of calling the clerk aside after the perpetration of a mistake and paternally explain the correction they desire. Of course, that is better than the other method, but still it is not good enough since it is only done after a mistake has been made.

We have all heard and read recommendations that stores hold sales meetings; and, of course, the larger stores do this routinely. In smaller stores, however, it is not done very often because of the objection of the employer that he has only one or two or three clerks. Apparently he overlooks the fact that the sales meeting may be held if there are only two sales people, or if only two sales people are present, himself and one clerk. Store sales meetings must be properly handled. They must not be run like a lecture. They must not be simply a case of the employees gathered uncomfortably in a room in the back of the store to receive a know-it-all lecture by the boss. They must rather be conferences in which even the soda boy has a equal right to voice his opinion. They can be guided by the boss, but they should not be dominated by him. Every one should be given the opportunity to discuss, and even argue, the points which the employer has presented. In this way, real enthusiasm can be developed, and the experiences of the clerks with customers will find an appreciative audience where each one can learn from the other.

All of us have seen or experienced in recent years examples of bad selling techniques. All of us have been offended by the "take it or leave it" type of salesmanship that I mentioned a moment ago. We all know that our salespeople - the people who really meet our customers face to face - can make or break the profits. They are doing it in every drug store in this United States every day. A clerk with only vague ideas of salesmanship, with little or no knowledge of the product cannot be expected to do much of a job of selling anything but what his customer demands. He certainly cannot sell without the "know how," enthusiasm, incentive to demonstrate his salesmanship. You know very well what is going to happen — the same thing that happens to a girl who wears cotton stockings. Nothing! That is bad enough, but it is even worse when a customer comes into your store with at least a partially formed idea of what he wants only to be met by a salesman who not only does not know what he is talking about, but one who almost deliberately antagonizes the customer. Then you not only lose the immediate sale - you lose that customer forever after.

All of this leads up to another answer to the question - what does proper sales training do? It does more than sell merchandise, more than give your clerks enthusiasm, more than give them more "know how" of the products you have to sell. It helps to build the most difficult part of your business structure. It builds good will and good public relations. If you have these well built, you need never worry about more business and more predictable profit. It makes all the difference between just hoping you will get more business and knowing you will get more business.

Most retail drug stores cannot survive on prescription business alone. They must engage in "over the counter" sale of a wide variety of products. I personally have no quarrel with this over-the-counter business; and in fact, I want to recommend that we add another over-the-counter item. I recommend that we add to the inventory, and aggressively sell, in every retail drug store, over-the-counter public relations. In too many retail drug stores efforts to influence the public's attitude toward the drug business have been stock, but have been used as if they could only be dispensed on prescription. It is about time that we put our public relations on continual display. Very well, you may say, how can public relations be made on an over-the-counter product? Over-the-counter public relations, which is nothing more or less than the generation of good will for your store and your profession, cannot be adequately displayed or sold if you, the owner, are the only one that understands the problem; and it cannot be sold if the merchandise and services which you offer do not measure up to the impression you want the public to receive. Some retail druggists continue to insist that their clerks try to sell and that their customers accept what could very well be called "counter irritant" products: Products which, first, violate the cardinal rule that customers want to buy what they want - not what you want to sell; products which are of such nature that sales clerks cannot enhance their own self-esteem by such sales; products which do not have an inherent quality which could be defined as "clerk acceptance." It is the sort of merchandise which I like to call "irritating inventory." The conscientious store owner is irritated

when he sees it on his shelf - the clerk is irritated when he reluctantly has to push this merchandise - the customer is irritated when he is urged to buy it. No one likes to have known merchandise forced upon him - no one believes such merchandise is the best - no sales clerk really likes to sell it himself - and no retail druggist can take pride in that type of sale. So, if you have "counter irritants" in your store, I would suggest that you do something about them.

It has been increasingly apparent the past number of years that success is achieved quickest and more permanently by the retail druggist who caters to his customer's preference. If you do so, I think it means simply this - Every time you wrap up a package, you also wrap up a little bit of good will for yourself and store and in the final analysis that is the acid test. I think that selling is one of the outstanding problems we have to cope with, either at the retail level or the social level.

What I have said so far is intended to impress you with the fact that one of the over-all problems of pharmacy, as a business and as a profession, is intimately associated with one of your intangible assets - your store's good will. The only place where you can cash in on this asset is - across your counter, and here, too, is where clerk sales training pays off. It pays off in confidence, both on the part of the clerk and on the part of the customer; it pays off in enthusiasm and co-operation of your sales people. It pays off in profit to you - and that is good public relations.

There are many definitions of selling. "Selling is the exchange of a service or a commodity for a profit." Another definition, which I believe is very good, is "Salesmanship is selling commodities that do not come back to customers who do come back." Selling is an art, a profession, and a science. Selling is a way of life. You have to sell yourself, sell your services, to every one you talk to.

The ABC of selling is the ABC of proper living. Ability is one of the real "A's" of selling. "B" is the backbone of selling - wishing for something is wishbone thinking, asking for something is jawbone thinking, but going out after what you want is backbone thinking. This requires confidence in your-

self. "C" stands for courtesy—we don't have to go into that—and it also stands for conservativeness. A conservative is a man who has something to lose. "D" stands for Determination. We must convey the fact that we know where we are going. "E" stands for enthusiasm in selling. "F" for fear and friendliness. No one cares for a "yard-stick" face. We all like good natured people who are enthused over that they are selling. This all can be accomplished by "Back Room Conventions."

It has been a pleasure to be here with you. Thank you.

NEWS NOTES

James Miller has moved to a new location in Arlington. He recently bought the Maxwell Drug in that city.

James Baumbach, a 1950 graduate and registered pharmacist, has accepted a position with the Pearson Drug Store in Sisseton.

Mr. and Mrs. Don Barr are the proud parents of a baby boy born on August 23. Don is employed at the Thomas Drug Store in Watertown.

Professor Guilford C. Gross received a \$1500 Scholarship from the American Foundation for Pharmaceutical Education and is working on his PhD. in Pharmacology at the University of Florida. His wife and children accompanied him to Janesville, Florida.

South Dakota State College has resumed its course of studies with 32 freshman enrolled in the College of Pharmacy.

Conaid P. Abler received his Masters Degree at S.D.S.C. this summer and has replaced Prof. Gross as an instructor in Pharmacology.

Mr. and Mrs. Burdette Anderson are the proud parents of a daughter born on August 17. "Bud" is a pharmacist in the Casey at Chamberlain.

Mrs. Warren Pelligrin is a new clerk at the Kendall Drug Store in Brookings.

On September 17th, at Watertown, **Carol Olson** was married to **Dale Youells**. Mrs. Youells, a 1950 graduate, is employed at the Shirley Pharmacy in Brookings and Mr. Youells is a senior pharmacy student at State College.

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histologically benign but are locally invasive and it is practically impossible to remove them completely. The symptoms are variable depending on extent and location of the lesion. The duration is from six months to 5 or 6 years, with an average of 4 years. The treatment is surgical excision for symptomatic relief. Ninety per cent recur within five years, and Bell has stated there are no permanent cures. These tumors are radioresistant.

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AUXILIARY ACTIVITIES

OUR FORTIETH ANNIVERSARY

Our Auxiliary is celebrating it's fortieth anniversary this year. I wonder how many of you know that the South Dakota Auxiliary is the oldest, continuous Auxiliary in the United States! This fact was presented at the AMA Auxiliary meeting in San Francisco in June. We have the original copy of the constitution and by-laws and have had photostatic copies made as proof to substantiate our claim. We should be proud when we think that the doctor's wives of two decades ago had forthought enough to see that it would be an advantage for the doctor's wives to be organized.

HISTORY

The South Dakota Medical Association was holding it's twenty-seventh meeting in Hot Springs the last week in September 1910. A number of their wives had accompanied their husbands to the meeting. Some of these ladies had been talking about organizing, so it was decided to call a meeting at 3 o'clock in the parlors of the Evans Hotel. Out of this meeting came the organization of the first Woman's Auxiliary to a State Medical Society in the United States. That important day was September 29th 1910. Most of the other auxiliaries were not organized until at least ten years later.

The first officers elected that day were:

President .. Mrs. R. D. Jennings, Hot Springs
Vice-Pres. Mrs. S. M. Hohf, Yankton
Secretary Mrs. H. T. Kenny, Pierre
Treasurer Mrs. C. S. O'Toole, Vienna

Charter members whose means are listed on original minutes:

Mrs. W. S. Bentley	Hot Springs
Mrs. I. D. Brooks	Hot Springs
Mrs. I. M. Burnside	Highmore
Mrs. J. F. D. Cook	Langford
Mrs. H. M. Finnerud	Watertown
Mrs. S. M. Hohf	Yankton
Mrs. R. D. Jennings	Hot Springs
Mrs. H. T. Kenney	Pierre
Mrs. T. W. Moffitt	_____
Mrs. Mary E. Koobs	Scotland

Mrs. C. E. McCauley	Aberdeen
Mrs. C. S. O'Toole	Vienna
Mrs. W. E. Robinson	Rapid City
Mrs. W. J. Roberts	Hot Springs
Mrs. E. H. Spielgeberg	Hot Springs
Mrs. H. W. Sherwood	Doland
Mrs. E. M. Wagar	Bijou Hills
Mrs. C. W. Hargens	Hot Springs

According to the original manuscript the purpose of the Auxiliary was stated this way, "The object of this auxiliary is to bring the wives of the physicians together in a spirit of good-will and fellowship." The dues were one dollar.

Mrs. Jennings, our first president is still living and is about ninety-four or five years old. I wonder how many of the other charter members are still living. If any one can give us any information about any of these ladies, please write to me.

DISTRICT NEWS

Seventh District October Meeting.

The Seventh District Medical Auxiliary held it's monthly meeting October 3rd with a 6:30 dinner at the YMCA. Mrs. F. S. Stahman and her committee were hostesses to the 41 members present. Autumn flowers appointed the tables.

The business meeting was conducted by Mrs. Margaret Harris. An informal discussion was held on the medical meeting held in San Francisco in June by Mrs. T. J. Billion Sr. and Mrs. A. R. Myrabo, who were delegates.

New committee chairman were appointed as follows:

Projects	Mrs. W. A. Arneson
Program	Mrs. A. R. Myrabo
Courtesy	Mrs. Florence Nessa
Hospitality	Mrs. W. L. Opheim
Bulletin	Mrs. Don Manning
Publicity	Mrs. James J. Chalmers

Eighth District has Annual Fall Meeting

Members and guests of the Yankton District Medical Society were guests of Dr. and Mrs. F. W. Haas at the State Hospital on October 13th for their annual fall program

and business meeting. The large attendance included nearly all the members, their wives, the faculty of the University Medical School from Vermillion. Out of town guests included Dr. L. J. Pankow, Sioux Falls, President of the State Medical Association, and John Foster, Sioux Falls, Executive Secretary.

Dinner was served to about 80 guests, with Dr. D. B. Williams as host in the absence of Dr. Haas. Separate meetings for the Auxiliary and the doctors followed the dinner.

Auxiliary Program

Presiding over the Woman's Auxiliary meeting was Mrs. A. P. Reding of Marion, who is now our state president. The ladies business session and election of officers followed the showing of a film made at the AMA convention in San Francisco last spring.

Mrs. D. B. Williams of Yankton was named president of the district to succeed Mrs. Reding, and Mrs. Theo. Sattler of Yankton was re-elected secretary-treasurer.

At the national convention, the South Dakota Auxiliary, oldest in the nation was paid recognition for its 40 years of organization. The anniversary of its founding is being celebrated this year. A photostatic copy of the state's first by-laws and constitution was on display at the meeting.

Mrs. J. P. Steele,
Publicity Chairman.

The Sixth Annual Fall Conference is being held in Chicago Nov. 2-3 the La Salle Hotel. This is a meeting of all State Presidents and their President-elects and the National Officers and the Standing Committee Chairmen. The purpose is to discuss auxiliary business and the program as outlined by the National Officers. This year there are to be panel discussion groups and each state president was assigned to a panel. My name was drawn on the Today's Health Panel.

Mrs. Howard Wold, Madison, your President-elect and I will attend this conference next week. I am sure that we will be able to bring back some helpful information and suggestions which will in turn be of help to the various districts. I will have a complete report in the December Journal.

Mrs. A. P. Reding,
State President.

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eration in the heredity of granulomatous mothers."

Perrier² agrees with the conclusions of Gilbert.

Summary

The literature on Hodgkins disease complicated by pregnancy is scanty. The total reported cases of infants born by mothers with Hodgkins disease is 51. Of the infants that have been followed up and have died only one has died of Hodgkins disease. The oldest child, born by a mother with Hodgkins disease, was 18 years old in 1945.

If a woman has Hodgkins disease and the disease has been controlled by adequate roentgen therapy, pregnancy then supervening, the pregnancy will develop normally. If Hodgkins disease first becomes evident during pregnancy, the outlook for the mother is grave. Roentgen therapy may be utilized during pregnancy, if the embryo is not irradiated during the first six months of gestation, with a good prognosis for the infant.

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ANNOUNCEMENT!

**If you should change your address
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The Actions of Organically Bound Iodine

(ORGANIDIN) IN MAN #

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INTRODUCTION

Over the years iodides have been used for a varied number of widely scattered clinical conditions. In many instances the basic premise for their action is not known and their place in medicine remains to some extent an enigma. Texts in Pharmacology differ in their appraisal of the worth of iodides, especially in cardiovascular disease; one¹ quotes an old German couplet "Wenn man nicht weiss Wieso und Warum, Dann gibt man Jodkalium," (translated—"when you don't know what else to do, give the poor patient some potassium iodide"); while another² states that "Potassium iodide and combinations of iodine with fatty acids have been extensively employed of late years in cardiac and vascular diseases . . . ;" yet another³ does not make any reference to their use in this field. On the other hand, Herrmann⁴ calls attention once again to potassium iodide as a very useful alternative in cardiovascular disease entities including hypertension.

As suggested, a great deal of misunderstanding and conflict of opinion has arisen with respect to the place of iodides in medicine. In the essayists' opinion this is largely due to a lack of proper knowledge of their pharmacology which is something of a paradox inasmuch as they have been in use for a long period of time.

In this paper, we wish it were possible to categorically outline the pharmacodynamics of the iodides, but such is not feasible at this time. We are, however, addressing our attention to the use of an organically bound

iodine compound, Organidin and phenobarbital (as an elixir), (hereafter EOP), in the treatment of hypertension.

In this semi-final report we do not suggest that EOP is the answer in hypertension. So far as we know there is no perfect treatment for this disease otherwise there would not be so many drugs and techniques used. However our results on a limited number of cases were unusual to an extent that they seemed worth reporting and it is hoped that in the discussion period suggestions will be made to help us explain some of our findings.

Needless to say, no attempt will be made to discuss the physiology of hypertension since it has been so well summed up by Bradley⁵. "From a physiologic standpoint, essential hypertension is a vascular disease characterized by generalized arteriolar vasoconstriction which results in a sustained elevation in arterial pressure. In many cases the arterioles of the kidney and possibly the brain are involved to a greater extent than arterioles elsewhere in the body. Both the kidney and the nervous system have been implicated as possible primary sites of involvement. The chronologic relationship of vascular disturbances in these organs to the onset of hypertension has not been carefully defined although apparently hypertension can develop in the absence of any selective change . . . Cortical, neural, humoral and local reflex vasomotor activity all contribute in shaping the complex physiologic manifestations of the disease. Too little is known to assign preeminence to any one factor in this process."

Two papers, one by Evans and Loughnan⁶ and the second by Riseman⁷ gave an impetus to the present investigation. The former

*Part of the cost of this work was defrayed by a scientific grant from the Henry K. Wampole & Company of Philadelphia.

#Read at the American Therapeutic Society Meeting held in Boston, April 13-16, 1950.

authors tested 33 preparations for their hypotensive effect in hypertension and found that iodine and iodides were two of the seven which relieved symptoms more than did the placebo. Riseman⁷ reporting on the therapy of angina pectoris stated that potassium iodide in doses of 1 gram 3 or 4 times a day was usually more valuable in 12 per cent of the cases which did not respond well to other forms of treatment.

Most all authorities agree that iodides are not well tolerated and are prone to produce some gastric distress as well as iodism. In fact, there is evidence⁸ that small doses given frequently are more apt to cause iodism than larger ones.

For these reasons a form of iodine organically bound as in Organidin was chosen for these experiments and tolerance⁹ to it in the human was compared with that of Lugol's solution. Organidin is the complex mixture of organic iodine derivatives and accompanying substances which result from interaction between iodine and glycerin. Slide I illustrates the results which clearly show that Organidin (in much higher than recommended doses), each 1 cc. representing 0.025 grams or 10 minims $\frac{1}{4}$ grain of iodine, caused no unfavorable side-reactions definitely attributable to this preparation, while Lugol's was not well tolerated even in doses smaller than usually employed.

It is well recognized that the iodides per se do not produce hypotension. However, it is generally accepted that a lowering of blood pressure is not necessary in hypertension provided the attendant symptoms are improved or relieved. This is borne out in Evans and Loughnan's⁶ work and Goldring¹⁰ states his views thusly: "The ultimate goal of symptomatic measures is relief of subjective symptoms and while this is frequently accompanied by the decline of the blood pressure level, is not to be interpreted as regression in the underlying cause of the disease, but rather as amelioration of those secondary and reversible factors which are superimposed on the basic causative mechanism.

"While relief of subjective symptoms may completely rehabilitate a hypertensive patient, mere lowering of the blood pressure level without relief of symptoms serves no such purpose. This is not to imply that

lowered blood pressure is necessarily without some benefit, but rather that it is not to be considered the prime objective of a plan of symptomatic management."

A routine suggested by Allen¹¹ was followed in all patients. Blood pressures were taken approximately twice a week for two or three weeks before any medication was started. After commencement of the drug, blood pressures were taken weekly for varying periods of time varying from 53 to 221 days. When the drug was withdrawn blood pressures were measured twice a week for at least two weeks to determine the effect of withdrawal.

1. Effect of Organidin alone:

Seven patients with essential hypertension were administered 3 cc. of Organidin three times per day for from 54 to 141 days. No significant alteration in blood pressure was observed but the subjective symptoms of headache, backache, dizziness, anorexia, weakness and loss of "pep" were fair to moderately relieved (25 percent).

2. Effect of Elixir of Organidin with Phenobarbital (EOP): 0.6 cc. or 10 minims of Organidin representing 15 mg. or $\frac{1}{4}$ grain of iodine together with 12 mg. or $\frac{1}{5}$ grain of phenobarbital.

(a) In 21 private patients, EOP was administered four times a day (before meals and before retiring) in teaspoonful doses for 82 days. The level of blood pressure prior to therapy ranged from 155/85 to 290/142, and the hypertension was either essential or associated with arteriosclerosis, diabetes, menopausal anxiety, adenoma of the thyroid, peripheral vascular disease, obesity, and a previous cerebro-vascular accident. After therapy the range was 128/80 to 230/102. The average over all change was (-)20/9. However, these patients all complained of one or more of the usual subjective symptoms and as a general rule two weeks after taking EOP they were markedly relieved (50-75 per cent).

(b) To rule out the psychotic or psychological factor, 14 patients from a mental hospital suffering from hypertension associated with dementia, schizophrenia, pure psychosis and the like were similarly treated for 53 days. The range before and after EOP was 176/92 to 231/95 and 154/86 to 219/89 respectively, and the total change was a (-)11/9.

3. Effect after withdrawal of EOP:

To date one group of 5 and one group of 4 of the private patients tested under 2 (a) have been withdrawn to ascertain the withholding effects of EOP.

(a) The first group had received a total of 172 days of treatment and were withdrawn for periods of 7 to 42 days. The blood pressure change before withdrawal was (-)18/5 compared to the reading before treatment with EOP. After the drug had been stopped the change was (-)2/0 compared to the original reading. The subjective symptoms largely returned in a week or ten days. (Table I)

(b) In the second group the patients received treatment for 221 days and the change from the original before and after withdrawal was (-)48/17 and (-)10/9 respectively. In this group as well, side effects of the disease returned early. (Table II)

DISCUSSION

The results give distinct evidence that organically bound iodine with phenobarbital has a lowering effect on the blood

pressure in selected hypertensive patients. To lend further credence all of the results were in the same direction which is a most important experimental criterion. Of perhaps more importance is the salutary effect it produces on the associated subjective symptoms. As a matter of fact, it has been extremely difficult to withdraw any of these patients because they had obtained such excellent relief from the preparation. Indeed, most of these patients were able to return to some semblance of normal living and work, and, even though the blood pressures were not markedly lowered, such is not necessary as related by Goldring¹⁰.

None of the patients complained of side effects such as gastric distress or skin eruptions due to EOP, nor did any detectable tolerance or intolerance develop in the length of time it was administered. Curiously, one private patient with a previous splanch-nicectomy noted urgency and frequency of urination one week after the drug was started, but this shortly disappeared. It was obviously not possible to check the effect of

TABLE I

EFFECTS ON BLOOD PRESSURE FOLLOWING WITHDRAWAL OF EOP

Clinic No.	A. B.P. prior to treatment	B. B.P. after 82 days of treatment	C. B.P. prior to drug withdrawal*	Length of time withdrawn	D. Present B.P.
1. 6685	200/104	176/100	192/100	7 days	210/110
2. 1098	165/95	128/80	131/82	10 days	156/94
3. 3540	180/92	168/96	158/90	14 days	184/98
4. 6901	200/112	190/102	180/110	28 days	182/90
5. 325	185/94	180/90	180/90	42 days	190/102
Average	186/99	168/93	168/94		184/99

*172 days of treatment.

CHANGE:

1. A to B (-)18/6
2. A to C (-)18/5
3. A to D (-)2/0

TABLE II

EFFECTS ON BLOOD PRESSURE FOLLOWING WITHDRAWAL OF EOP

Clinic No.	A. B.P. prior to treatment	B. B.P. after 161 days of treatment	C. B.P. prior to drug withdrawal*	Length of time withdrawn	D. Present B.P.
1. 1876	180/92	158/84	140/80	14 days	178/94
2. 2226	190/120	164/84	144/84	56 days	184/86
3. 7029	204/110	182/100	150/100	14 days	202/120
4. 7266	250/140	200/130	200/130	14 days	220/124
Average	206/115	176/99	158/98		196/106

*221 days of treatment.

CHANGE:

1. A to B (-)30/16
2. A to C (-)48/17
3. A to D (-)10/9

EOP on the subjective symptoms of the mental patients but no untoward reactions occurred.

Most of the private patients had previously received some form of nitrite or nitrate therapy with unsuitable results and hence the comparative value of EOP was deemed certainly most worthy of a trial as substitute therapy. Perhaps the more dramatic fall in a shorter period of time with the nitrates is a deterrent factor. It has been argued that too sudden alterations in the physiologic status quo may not be as favorable as a slower and more prolonged effect. In this connection, it required approximately 10 to 14 days for EOP to produce observable results as compared with minutes for man-nitol hexanitrate to produce hypotension. This factor of difference seems especially valuable for serious consideration.

From the data submitted it appears that maximal results will be obtained in approximately two months after using EOP. It is also obvious that the preparation must continuously be administered to insure success. In our opinion, after 60 days, effective support can be maintained for much longer periods by reducing the dose to one

teaspoonful three times each day with little or no fear of side reactions.

Of special interest was the result obtained in those patients withdrawn after 221 days of treatment (3a). These four cases were for the most part markedly arteriosclerotic and they exhibited a much greater fall in both systolic and diastolic pressure than any of the other subjects tested.

The observed effect in the arteriosclerotic hypertensive may be coincidental, but Page and Corcoran¹² and Boas¹³ report prevention of experimental arteriosclerosis by iodides. Whether or not iodides have any beneficial effects after production of arteriosclerosis is not clearly documented, but it becomes an interesting speculation.

Phenobarbital has been widely used in treating the symptoms attendant to hypertension, especially in those in whom a neurogenic factor plays a part. However, most clinicians seem to feel that it is helpful in most cases since the majority exhibit some signs of instability. The dose recommended varies remarkably but from 15 to 30 mg. ($\frac{1}{4}$ to $\frac{1}{2}$ gr.) 3 or 4 times per day is often administered. Long continued use of this barbiturate is not indicated because Ham-

bourger¹⁴ has reported that all the barbiturates may cause a chronic habit and in certain types of cardiac neuroses the condition may be actually made worse. Indeed, Weinstein,¹⁵ has also pointed out the drawbacks of long continued use of this drug. In addition, the larger doses definitely depress the patient so that he is sluggish and drowsy most of the time.

With these facts in mind only 12 mg. (1/5 gr.) of phenobarbital was included with each 4 cc. of EOP. One of the most striking observations noted was a definite clinical synergism of the phenobarbital sedation by the Organidin. As a matter of fact, it appeared to be equivalent in effect to about twice (24 mg.) an amount of phenobarbital alone. However, stultification was not a prominent finding and, as already stated, patients were able to lead a fairly normal life. This interesting phenomenon of synergism is now being investigated in animals.

The mechanism of action of EOP is not fully understood. However, there seems little doubt but what the two drugs do cooperate one with the other in such a fashion as to relieve the symptoms in hypertension and to bring about moderate hypotension.

On the basis of clinical observations the lowering of blood pressure by EOP is based on the combined effect of Organidin and phenobarbital since the first drug does not significantly lower blood pressure and the second does only when very large doses are given. That the "organic iodine" possesses a fibrolytic effect such as is seen with iodides in gumma is supported, in some measure, by the observation mentioned heretofore that the arteriosclerotic cases exhibited a much greater fall in both systolic and diastolic pressures than any of the other subjects tested. It would be difficult to explain the difference except on the basis of a similar effect.

SUMMARY

1. Elixir Organidin and Phenobarbital (EOP) would seem to be a useful tool in the management of hypertension and concomitant symptoms.

2. It is well tolerated and is administered orally.

3. Blood level determinations, as with the thiocynates are not necessary, hence it is convenient to patient and physician alike.

4. The action of phenobarbital is potentiated by Organidin without causing undue sedation.

5. The smaller dose of phenobarbital tends to prevent neuroses resulting from larger doses more commonly used.

6. It is hoped that EOP may be given further clinical usage.

We are especially grateful to the Yankton Clinic and the Yankton State Hospital for their cooperation in furnishing patient material for this report.

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GULLIBLE'S TRAVELS

October 16

6:30 attended the meeting of a group of members of the South Dakota Medical School Endowment Association at which fund raising plans were drawn up.

October 18

Talked to 35 members of the Transportation Club in Sioux Falls at the YMCA on socialized medicine. **S. W. W. Carr** of Sioux Falls Transportation Club Bureau arranged the talk and made the introduction.

The next day **Dr. Pankow**, president of the Association and I spoke to the Kiwanis Club of Brookings at noon and to the Pierre District Medical Society meeting at the Falcon Cafe in Pierre that evening.

October 23

I drove to Burke to take part in the celebration on **Dr. R. J. Quinn** who was selected South Dakota's General Practitioner of the Year. Drove back late that night with **Dr. Guy VanDemark** who had come down with other doctors visiting from Sioux Falls.

October 26

I rose early and drove to Gettysburg where I talked to a noon meeting of the Rotary Club a guest of **Dr. E. H. Collins**.

That evening drove to Pierre where I was

(Continued on Page 363)

The Bunnell Operation for Opponens Paralysis

Robert E. Van Demark, M.D.

Sioux Falls, S. D.

The ability to oppose the thumb to the fingers fundamentally distinguishes the hand of man from that of certain animals in which digital grasping alone is present. The highly developed skills of the technician are largely dependent on this ability; loss of it through injury or disease robs him of his capacity to perform his specialized work.

In South Dakota a rather high incidence of this disability has resulted from the cervical poliomyelitis cases of recent years' epidemics. It would seem appropriate at this time to call attention to an operation first reported by Bunnell twenty-six years ago. Although failures may follow this operation, as will be outlined later, it is a fundamentally correct operation and the results have been generally satisfying to us over a period of several years. In 1938, in the *Journal of Bone and Joint Surgery*, Bunnell described the operation in detail. He emphasized two principal points: (1) the line of pull of the tendon transplant must be in the direction of the pisiform bone; (2) the tendon should insert on the dorso-ulnar aspect of the base of the proximal phalanx of the thumb.

If these two principles are followed, a number of tendons may be used for the transfer. A tendon loop may be constructed at the pisiform bone from a portion of the distal carpi ulnaris tendon. Fortunately, the extensor pollicis brevis tendon attaches at the proper point on the proximal phalanx of the thumb; this tendon can be divided proximally at the wrist, re-routed across the palm to the tendon loop through which it is placed for attachment to an active motor tendon. For the latter, the flexor carpi ulnaris, the palmaris longus, or any of the sublimis tendons may be used. The simplest method of performing the operation is to detach the sublimis tendon of the ring finger at its insertion, loop it around the flexor carpi ulnaris tendon at the wrist, and re-direct it across the palm to the dorso-ulnar aspect

of the base of the proximal phalanx of the thumb.

Our experience with the latter procedure has demonstrated the potential disadvantage of looping the tendon about the flexor carpi ulnaris distally; in one such case the transplanted sublimis tendon functioned excellently on removal of the cast three weeks post operatively, but with the passage of time the loop around the flexor carpi ulnaris gradually became located more proximally at the wrist. The line of pull was then no longer in the direction of the pisiform bone and the transplant became ineffective. This defect was corrected by replacing the loop distally and holding it there by placing a portion of the flexor carpi ulnaris about it. One other failure of operation has resulted from late rupture of the suture line as the result of trauma. In one instance the tendon loop at the pisiform bone was too large so



Figure 1. (McKenna Hospital Case No. 89888). Patient unable to oppose thumb to little finger as a residual of poliomyelitis. Note atrophy and paralysis of thenar group.

that the tendon pull was directed proximal to the pisiform bone, rather than toward it. These latter failures were both corrected at subsequent operations. In another case the extensor pollicis brevis tendon was very small as a result of paralysis of several years duration during the active growth period; in such a case it would probably have been better judgement not to use it.



Figure 2. (A and B) Postoperative result in same case, showing active motion present on removal of cast and instruction in opposing thumb. The flexor carpi ulnaris was used as a motor tendon in this case.

The post operative course is usually uneventful. The thumb is immobilized in the position of apposition and the wrist in moderate flexion for a period of three weeks. On removal of the cast and skin sutures, the patient is instructed in movement of the motor tendon controlling apposition of the thumb. This is usually easy and can be readily performed (Figs. 1, 2A and B). The thumb should be further protected by a splint at night for an additional two or three weeks. In patients with peripheral nerve injury, the use of the affected hand in smoking is forbidden because of the sensory loss which predisposes to burns.

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GULLIBLE'S TRAVELS

(Continued from Page 361)

able to transact business at the offices of the Pharmaceutical Association and State Department of Health.

The next evening drove over to Hoven where I talked to a public gathering at the high school. **Dr. J. B. Janis** arranged the talk and made the introduction. A large and enthusiastic audience attended the meeting.
November 8

Drove to Pierre with **Dr. Guy VanDemark** and **Dr. L. J. Pankow** for a meeting with the State Director of Selective Service and representatives of various professional associations who are interested in the problems of the special draft. Drove home the next day.
November 11

Attended as moderator in a radio broadcast at Radio Station KSOO on Mental Health. The program was sponsored by the Council of Parent Teachers Association in Sioux Falls.

That afternoon I attended a meeting of representatives in this part of the state who will attend the White House Conference on Children and Youth at the Sioux Falls Chamber of Commerce.

November 15

Drove with **Dr. Pankow** to Omaha and attended the AMA Regional meeting at the Paxton Hotel.

November 18

I drove to Minneapolis where I attended the very excellent social functions preceding
(Continued on Page 374)



PRESIDENT'S PAGE

L. J. Pankow, M.D.

December Message

In my message for October, no derogation was intended by the use of the word "ghetto." I do not associate with that word the many friends who have ably demonstrated their loyalty to the same ideals that I have, but to the few who are subversive in their attitudes regarding the things we accept as the American way of living.

At a recent regional meeting of the AMA Committee on Legislation in Omaha, attended by delegations from the Dakotas, Minnesota, Iowa, Nebraska, Kansas and Missouri,

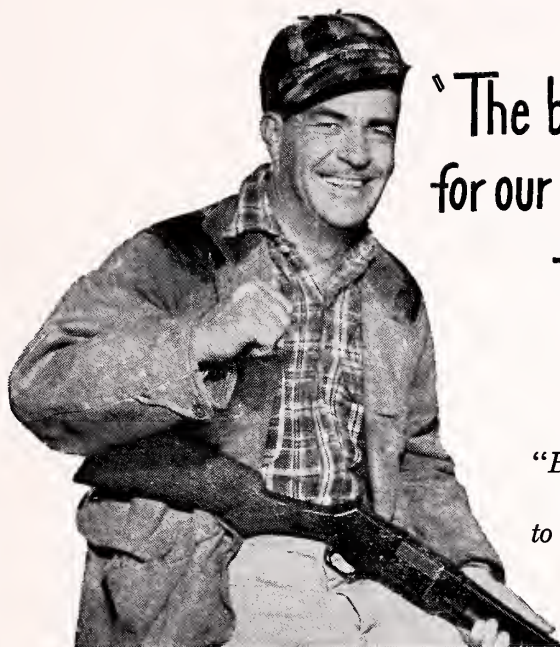
Doctors Joe Lawrence and Frank Wilson of the Washington Office asked for expressions on Federal Grants for Public Health Units. In view of Public Health Association advocacy of giving Medical Care thru Public Health, they wanted to know just what was meant by "public health." In view of the many diseases now being treated by Public Health Agencies this seemed somewhat confusing. If the question is confusing to Doctors, how much more must it confuse lay legislators who after all, are trying to benefit their constituents.

It is time that we get a clear and definite distinction between "public health" and "private medical" problems. The prerogative of "Public Health" should be with those diseases and conditions which if uncontrolled become a menace to the community. "Private Medical" problems are those diseases and conditions which threaten only the life or health of the individual, and is NOT a threat to the health welfare of the community. Public Health embraces community sanitation and hygiene, cleanliness of foods and beverages, and of water supplies, contagious diseases such as tuberculosis, venereal and epidemic diseases, and similar conditions. It should include the detection and control of insanity, for if not properly handled an insane person can well menace an entire community. Many "private medical" problems are often included under "Public Health" because of public interest in them. In this category are diabetes, heart disease, rheumatic fever, cancer and other recently "surveyed" conditions. These may be disabling and crippling for the sufferer, but they are not a direct menace to the life or health of anyone but the victim himself.

However, even when health departments limit themselves to their proper field, there is too great a tendency for them to treat the disease found without regard to the ability of the patient to pay for his own medical care. Public Health Departments or Units should carefully screen the indigent from the solvent patient. They should educate the public on health and sanitation and the detection of communicable disease in themselves and their neighbors, and the Doctors about accepted and improved methods of treating and preventing these diseases. They should encourage and direct prophylactic administrations, but not take this work and incident income from the private physician. It is unfair to tax a Doctor to support a Public Health Department which takes away his legitimate income with which he is expected to pay those taxes. The Health Department should be a liaison department between the patient and adequate treatment by a doctor, except in those cases where the patient is financially unable to pay for private medical care.

As for Federal Grants for public health units, let no one forget that the Federal Government has no money except what we pay as TAXES. The "cents" returned to a community represent the "DOLLARS" that the same community has paid in taxes, less the cost of administration of the funds, and paying salaries for clerks to apportion and direct the grants. Communities can maintain their own health departments much cheaper by community level paying for them than thru Federal Grants.

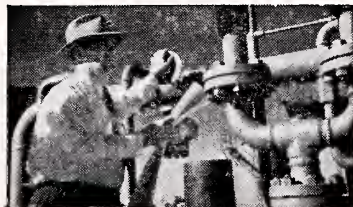
If these observations seem logical to you, Doctor, write to your Senators and Representatives in Washington and tell them that you agree with these ideas. I am sending copies of this message to the Senators and Representatives from South Dakota. If you agree with my presentation of the matters, write them and tell them you do, and get some of your lay friends to do the same. Their names and addresses are: Senator Francis Case; Senator Karl Mundt — Senate Office Building, Washington, D. C.; Honorable Harold Lovre; Honorable E. Y. Berry — House Office Building, Washington, D. C.



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EDITORIAL PAGE

PROGRESS REPORT ON AMERICAN MEDICINE*

Physicians of this nation are deeply concerned with the prevention of sickness and injury of all our fellow citizens. The care of the sick, the prevention of disease and the alleviation of suffering are the center, the impelling motive, the inspiration, around which are built all the activities of the medical profession. The universally recognized accomplishments of medicine by the combined efforts of research and the application of new knowledge in careful and intelligent practice have been attained in a nation of free enterprise and, in the past, sound economy. The problems of medicine are closely integrated with the economic and social conditions of our people. They are mutually interdependent.

The application of science and discovery make possible continuous advances and new achievements in prevention and control of disease — better medicine. There are, however, inherent limitations in medicine; physicians cannot create bodily immortality. Death cannot be prevented; it can only be postponed. All that the physician can do about death is to change age and cause. Proponents of nationalized medicine seem to assume that there is some absolute standard of medical practice and talk glibly of “adequate” medical care as if they could set a standard and a limit to medical progress. Medicine is not static. With other men here, I have seen changes in medicine in the past 50 years, during which time was regarded as good medical practice has become entirely inadequate today. By the very nature of medical progress, it can never attain perfection, because the goal moves ever in advance. One thing is certain, however, you cannot improve medical care simply by setting up a uniform as-

sembly line system — which always has and always will make it worse. Already in England there is now being advertised private insurance to protect against the dangers and delays of government care. This indicates that even in Socialist England the people are finding that they must turn again to private enterprise, to protect themselves against the evils of socialism.

This development in England is so significant that I wish to read a few sentences from an advertisement of the British United Provident Association which appeared in the London Punch, May 10, 1950.

“Which would you choose in the event of illness? Private treatment or the General Ward!

“The National Health Service ensures that everyone receives medical and, if necessary, hospital treatment in the event of illness or operation.

“To many people, however, the necessary formalities, the waiting and, finally, treatment in a general ward, are disconcerting both in anticipation and in practice.

“In view of the fact that serious illness or the need for operation so often strikes without warning, it is no more than obvious wisdom to safeguard yourself and your family without delay”

We as physicians are resolved that the continuation of the marvelous progress in America shall not be thwarted or diverted by the introduction of a foreign ideology which, as in past decades, now elsewhere before our eyes, is destroying the quality of medical care and delaying the correction of obvious faults. We are well aware of the social and humanitarian necessity of provision for the health care of the indigent and the victims of ill fortune whose plight is due to both economic and medical factors. In former days this was accomplished by local communities and more

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recently by many excellent city and state aid programs, to which physicians already have given personal and professional support. This aid can be supervised best under local administration, and it then can reach the needy without being diluted by the impositions encouraged by socialistic promoters of the welfare state. We already have achieved in this country the best medical care in the world.

Last month we were favored by the pronouncement of a spokesman for the political backers of government medicine to the effect that now they would be pleased to give up the program for compulsory sickness insurance if medicine could offer any other solution for improving the medical care of the nation. This is an official confession of the bankruptcy of the program plaintively described as "so close to the heart" of their political leader. Recent political events have no doubt played some part in recasting Act II of this modern political Comedy of Errors. An intelligent expansion of sound and helpful programs will succeed without unnecessary national legislation. We shall do best by encouraging more individual responsibility, more self help and fewer treacherous governmental crutches, more honest statements of fact and less deliberate deception and playing with the truth, more willingness to work and less national political tinkering.

OUR MEDICAL AND ECONOMIC PROBLEM

The objectives of medicine and their relation to our entire American economy are now much better understood by the people of this country than at the outset of our educational campaign. Let us review the progress of this critical fight of medicine and of all patriotic groups to defend our America from the external and internal attacks of socialism and its twin, communism. Prior to two years ago the insidious growth of socialistic practices promoted in the name of social and economic welfare had placed businesses, medicine and even legitimate government on the defensive. In this gigantic malignancy a few ambitious but unscrupulous men did not hesitate to falsify statistics and sow seeds of discontent and distrust, audaciously using the familiar Marxian technic of the "misery of the masses" in a country the people of which are better fed, more prosperous and more productive than in any nation in history.

The subjugation of medicine to political purposes has always been an early objective in the promotion of the socialist welfare state. Nibbling at the personal responsibility, initiative and freedom of the individual by supposedly innocent and superficially attractive welfare measures went on for years without much opposition. Physicians and others interested in the welfare of the public failed to recognize this process of undermining the originally strong pioneer spirit of our citizens. As professional men and as citizens we failed to realize the gravity of this attack on the moral foundations of our country. After the preliminary softening of the national fiber by alleged temporary welfare promises and benefits, the direct attack on medicine was intensified and medicine found itself in the front line in defense not of medicine alone but of the American way of life.

THE OFFENSIVE

Now, after two years, the real threat of socialism is better understood by our citizens, and physicians together with other patriotic groups are on the offensive. Much of the previous national inertia which affected business and labor groups as well as medicine has been overcome. Thousands of nonmedical citizens and leaders, as first impressed by the false premises of arguments for compulsory sickness insurance now realize its inevitable destructive effects on quality of medical care, on the independence of the American citizen and on the economic stability of the nation. Still others, though now informed, unfortunately hesitate to "lose face" by admitting that they were deceived. Members of the medical and allied professions are better united in understanding and in purpose than ever before and are determined that there shall be no shackling of medicine and no compromise with the evils of socialism.

A vigorous campaign for voluntary insurance by medically sponsored groups and by commercial insurance companies has brought hospital insurance to more than 68 million, and protection against surgical costs to 40 million and for medical cost to 16 to 18 million persons. Sixteen thousand persons are being added daily to those participating in voluntary health insurance plans. Meantime the professional accomplishments of the medical profession in the prevention and cure of disease have proceeded apace with continuing

reduction of illness and lowering of death rates. This progress will be still more rapid when we have disposed of this socialist threat to America.

The general public has been made increasingly aware of the dangers of solialized medicine and socialism, and resolutions in opposition to compulsory health insurance and in favor of voluntary health insurance have been adopted by more than 10,000 organizations. More than 6,600 are nonmedical and include farm bureaus, the American Legion, civic and women's clubs, religious groups, insurance groups and other professional organizations. This is indisputable evidence of the disgust of thinking persons across this land, independently of the political parties, for the insidious socialistic programs which will cost the average man more in taxes than he can ever receive in benefits.

CONFUSION

A few months ago it became evident that a bill for the nationalization of medicine could not pass this Congress, and so the program of its proponents was changed and an attempt was made to introduce further fragments of socialism by means of small federal contributions to this or that new welfare agency. A number of such bills were introduced carrying almost no financial commitment, obviously intended to set up a pattern — a foot in the door — so that later these little bureaucracies could grow. In other bills it has been proposed to give federal aid to projects which affect many phases of our economic, educational and medical life. Sometimes these proposals are urged on the basis of alleged need and at other times recommended as progressive social projects, often with the disclaimer of any present intent of local interference by government bureaucracy. No mention is made of the Supreme Court decision of 1942, which asserted the right of government "to regulate that which it subsidizes."

The American people would not now accept socialism as a substitute for our American democracy. However, there still is much confusion in the minds of the public and so many physicians as to the importance of the so-called fringe bills. For the past 15 years the American people have been conditioned to the gradual growth of welfare projects not only in medicine but in other fields of at-

tempted economic planning, which historically in other nations have always ended in economic dictatorship. Economic planning and welfare projects have been promoted as devious alternative measures in preference to meeting economic and social difficulties on the basis of individual responsibility and incentive of each citizen.

Responsibility for the social welfare of our people, in which all physicians as well as public-spirited citizens are deeply interested, has been gradually shifted from the local community and the state to a federal bureaucracy on the fallacious ground that only federal government could take care of exaggerated claims of alleged tremendous gaps in social and medical care. Great advances in medical and social care already made at state and local levels are interfered with by severe taxation of a wasteful federal government which always exacts an excessive brokerage for the support of the ever growing bureaucracy parasitic on each project. Thus the public and the medical profession have been conditioned to progressive steps which tend to remove from group after group of our citizens the necessity of personal effort. This process of softening and regimentation, whether by direct subsidy or by federal loans to small businesses, has been tolerated by this nation more readily following its temporary regimentation by total war.

A welfare measure, superficially attractive and perhaps relatively innocent in itself, forms a precedent; it is then easy to add a further welfare measure on the supposition that it is similar and perhaps complementary to previous legislation. Thus it is not surprising that many physicians and other thoughtful groups find it difficult to determine where such legislation should stop. This difficulty is also encountered by members of Congress who in the past have taken positions of compromise, which no doubt were strategically expedient at the time but which have persisted to plague those who now see the entire economic and social picture more clearly. A number of laws with a socialistic trend were formerly favored by members of the Congress before they had opportunity to think things through.

The only sound and consistent position for American medicine and the American people is that of opposition to any measures related

to the progress of the socialist welfare state. Worthy objectives have been habitually used to camouflage national proposals essentially dangerous to our medical, social and economic well-being. These objectives can be attained more safely and effectively by local and state efforts after appropriate thorough education of the public.

The offensive battle of the medical profession, in addition to outspoken opposition to the socialization of medicine and the socialization of America, must include opposition to fringe bills. We must clear our thinking from the muddle in which it has been placed by the insidious growth of welfare measures of the past 15 years, many of which were surreptitiously planned as steps toward socialism. Help for the needy and distressed can be supplied without destroying their individual freedom and subjecting them together with their fellow citizens to slavery of the police welfare state.

The successful program of local and state service to the sick and needy must not be nullified by dominating interference of selfish federal bureaucracies. Programs for preventive medicine must be advanced and not diverted by the destructive efforts of socialized medicine on the quality of medical service to the public.

NATIONAL SOLVENCY

Medicine will flourish and progress only in a sound economy. Our efforts, therefore, must concern not only the interests of good medicine but also the maintenance of free enterprise and solvent finance in American life. We must labor to maintain the personal freedom and initiative of our citizens. Our funds then will be available to help the needy and improve the conditions of other citizens by local measures; citizens will not lose their initiative and sense of personal responsibility to the state. In this national emergency, whether physicians or business men or farmers or laboring men, we must not be guilty of cowardice or unwillingness to stand up and be counted. We shall have to oppose even some of our medical friends who have been deceived by the rosy red picture of the welfare state.

This is not a partisan political fight; it is a crusade in which every right thinking doctor who values freedom of opportunity, free enterprise and the maintenance of high stand-

ards of medical practice must join.

You, the members of this House of Delegates, represent all the states in the Union. It is by your efforts and influence that every doctor can be shown the part which he must play in the present crisis. We as physicians have traditionally shunned political activities. During war physicians have always joined in efforts to save our republic. Now is the time again to come to the rescue of our country, this time to help save it from socialism.

Physicians in every community must accept and take on the responsibilities of citizenship. First they must register and then vote. A survey taken recently disclosed that 13 per cent of physicians in the localities surveyed were not registered; in fact, 22 per cent did not vote. In this respect they are not different from other well meaning and patriotic groups; for example, 26 per cent of bank employees and executives were not registered and 32 per cent did not vote. The same survey revealed similar figures for pharmacists and ministers and for members of chambers of commerce.

We, as physicians, must pause in our practice long enough to inform ourselves of the issues which confront our country. We must realize that the country is being undermined by treacherous proposals initiated in the name of doing good. We must take an active part as citizens in our government. The problem is simply stated: Compulsory health insurance is socialized medicine despite recent frenzied political efforts to escape the issue. To socialize medicine is to socialize America. The effectiveness of our city, county and state aid programs for the needy and indigent, the further development of preventive medicine, the rapidly growing professional commercial voluntary insurance against financial hazards of illness, the multitude of fraternal and religious charitable and self-help agencies, must not be jeopardized and ruined by the imposition of deceptive and wasteful socialistic proposals advanced by those who hope to profit politically at the expense of the freedom of the American citizen.

Do we as a people wish to rush down the socialist road after Great Britain? The answer obviously is "no," but we must present forcefully our convictions. We as physicians and citizens shall not relax until, with other

patriotic groups in business, on the farm, in the other professions and labor, we shall have rolled back the socialist flood that threatens to engulf our American freedom and our solvency.

As I conclude my year of service as President, may I thank you again for the honor you have done me, for your own efforts in our crusade and, most of all, for your support, which has made a trying and difficult year much easier. Among the compensations have been the cooperation of the general medical profession and the unity of physicians and of other patriotic groups in our fight to maintain freedom of medicine and freedom of America.

Address of Ernest E. Irons, M.D., retiring president A.M.A.

SOCIAL SECURITY CHANGES INCREASE AID TO CHILDREN

A Social Security Act first passed in 1935 and now ammended this year makes provisions for extension of services for child and maternal health services.

Annual federal grants for maternal and child health services will now be sixteen and one half million dollars. Services for crippled children will total fifteen million annually and for child welfare services ten million annually. The Children's Bureau administers these grants under the authority delegated by the Social Security Adiministration of the Federal Security Agency.

None of the money is paid to children or their parents, all of it goes to official state agencies to be used in paying the cost of child health and welfare services. A great bulk of this money pays salaries of workers in the field of child health and welfare.

In order to qualify for funds under the three headings, each state must present plans for spending the federal grants that meet the requirements of the Social Security Act. Some portion of each plan must include expenditures of health funds in rural areas.

Most states receiving additional funds under the new act will extend present services to reach more children, do something for children with handicaps for whom there are no public services, and also train more workers.

Most of the services provided by State and local health departments for mothers and children are health promotion services; that

is, they are designed to help mothers and children keep well. Typical health promotion services are: prenatal clinics, visits to homes by public health nurses; well-child clinics; immunization services; medical and dental services for children of school age. Some States also provide treatment for sick mothers and children, but this is done in a very limited way for relatively few. All States use some of their funds for the training of professional personnel needed to provide these services.

All States operate diagnostic clinics where a child with a handicapping condition can be brought for a free diagnosis. Within the limits of their funds, all States provide skilled treatment for some children which includes medical care, hospitalization, and convalescent care. Children most generally helped by State crippled children's agencies are those needing orthopedic or plastic treatment.

Child welfare services are social for children. They are usually provided by child welfare workers in local communities. The first concern of these workers is to strengthen family life. Consequently, they help children with a wide variety of problems who are living in their own homes. They help children who are having difficulty in getting along with others. They help unmarried mothers and babies born out of wedlock. They help children who are being neglected or abused. When children cannot receive the care they need in their homes, the child welfare workers help to make other plans for their care, either in foster-family homes or in institutions.

PREGNANT THOUGHT?

A lot of material passes through our hands and into the four-cornered floor file, most without slowing down for a second thought. A new one recently dropped on our editorial desk which we thought was worth tossing out at least as food for thought.

The idea is presented in the National Wage Earner in an article by Nathan S. Davies III, M.D.

His thinking is that the "Fair Dealers" are about to run into trouble with their social security program because so many people are reaching the retirement age and

then living on for many, happy pension-filled years.

These pensioners are increasing as independent medical initiative lengthens the life span, thus making the future of social security extremely hazardous.

To combat this increased pressure on social security funds, according to Dr. Davies, the New Dealers are casting about for means of shortening rather than lengthening the life span. Their answer: compulsory health insurance better known as socialized medicine.

In other words, the end of social security troubles as far as the "Dealers" are concerned, is in a form of compulsory euthanasia.

We must admit that this is a new one to us. Is there logic here?

NORTH CENTRAL CONFERENCE OPPOSES AHA STAND

The North Central Conference made up of representatives of officers of Medical Association's in Minnesota, South Dakota, Iowa, North Dakota, Nebraska and Wisconsin resolved at their meeting on Sunday, November 19 to oppose the standardization program of the American Hospital Association by virtue of their endorsement of the present standardization program of the American College of Surgeons and the American Medical Association.

The program at the meeting was largely concerned with the relationships between doctors and hospitals. Dr. L. J. Pankow, President of the South Dakota State Medical Association, spoke on those relationships, while Dr. D. W. Stovall, of Madison, Wisconsin took up the Pathologists side of the story. Dr. Ralph Knight of Minneapolis discussed the position of the Anesthesiologists, and the Radiologists views were presented by Dr. Howard Hunt of Omaha.

The meeting was held at the Radisson Hotel in Minneapolis and was presided over by the president of the conference, W. A. Wright, M.D., Williston, North Dakota. After making his presidential address at the meeting, he presented Frank Wilson, M.D., Department Director of the American Medical Association's Washington office who talked on the 82nd Congress which will convene after the first of the year.

Dr. James Sargent of Milwaukee discussed

Emergency Medical Service and Procurement & Assignment. Dr. L. W. Larson, Bismarck, North Dakota, member of the Board of Trustees of the AMA was the luncheon speaker.

Doctors attending the Conference from South Dakota were L. J. Pankow, R. E. Jernstrom, R. G. Mayer, H. Russell Brown, Donald Breit, Dr. Van Sandt, and Executive Secretary John C. Foster.

CLASSIFICATIONS OF CERVICAL CANCER

In May of this year a committee of individuals representing the section of Obstetrics and Gynecology of the American Medical Association, the American Association of Obstetricians, Gynecologists, and Abdominal Surgeons, and the American Gynecological Society and the Editorial Committee of the Annual Report on the Results of Radiotherapy in Carcinoma of the Uterine Cervix, met to propose a modification in the classification of cervical cancer adopted by the Health Organizations of the League of Nations in 1937.

This new classification system will be known as the International Classification of the Stages of Carcinoma of the Uterine Cervix. The stages are as follows:

State O

Carcinoma in situ—also known as preinvasive carcinoma, intra-epithelial carcinoma and similar conditions.

State I

The carcinoma is strictly confined to the cervix.

State II

The carcinoma extends beyond the cervix, but has not reached the pelvic wall. The carcinoma involves the vagina, but not the lower third.

State III

The carcinoma has reached the pelvic wall. (On rectal examination no "cancer-free" space is found between the tumor and the pelvic wall).

The carcinoma involves the lower third of the vagina.

State IV

The carcinoma involves the bladder or the rectum, or both, or has extended beyond the limits previously described.

Letter to the Editor

November 2, 1950

John C. Foster, Secretary
 South Dakota State Medical Association
 Sioux Falls, South Dakota
 Dear Mr. Foster:

Ever since the construction of a new medical building on the University campus became a thought, a more definite reality as time went on, and now that construction is already begun, the thought has entered my mind that it would be very appropriate and proper to name the building after Dr. Joseph C. Ohlmacher.

We all know that Dr. Ohlmacher has devoted practically his entire lifetime faithfully in the performance of his duties pertaining to the University Medical School, often under trying and discouraging circumstances.

His many years of sincerity, devotion, and service to the school and many years of maintaining the caliber of the medical school training at such a high level should certainly be recognized.

I think that perhaps no more fitting an honor could be bestowed upon him at this time than having the new building named after him. It would be a constant reminder and inspiration not only to those who've already gone through the Medical School at the University, but also to those students who may in the future seek further light in the art and science of medicine, surgery, and all the related branches.

Sincerely yours,

GFM:gs George F. McIntosh, M.D.

**THE WASHINGTON OFFICE
 OF THE A.M.A.**

At the North Central Medical Conference held in Minneapolis on November 19th, which was attended by five officers of the S. D. State Medical Association, Dr. Frank E. Wilson, Deputy Director of the A.M.A. Washington Office, gave a brief outline of the work accomplished by the staff-members of this busy group. The Washington office has grown rapidly since it was established by Dr. Joseph S. Lawrence in 1944. Previous to that time an attorney checked pending legislation for the A.M.A.'s Chicago office.

Now the staff consists of three physicians, attorneys, editors, secretaries and sten-

ographers — a total of seventeen. The office is not a medical lobby, but an information center for Congressmen, doctors, medical societies, and numerous other organizations. The Washington office sends out regular and special bulletins with information on numerous subjects and has a mailing list of over 6,500.

During the session of the 81st Congress 15,000 bills were introduced and our Washington office followed and watched over 400 separate bills. Countless bills will undoubtedly be introduced in the 82nd Congress which are of vital importance to the medical profession — bills on such subjects as federal aid to medical education, compulsory health insurance, school health services, federal subsidies for health co-operatives, research in medical fields, reorganization plans, etc. It is vitally important that we as physicians be kept fully informed on such developments because the influence of the local physicians is much greater than that of the Washington office. Our Congressmen want to hear from the folks at home but we have to know what is going on in the Capitol before we can present our views. Since the Washington office was started, no legislation has been passed by Congress which the A.M.A. opposed, a record of which we may well feel proud, but not complacent.

The dues paid by the members of the A.M.A. help to support this vital office. A majority of the members of the South Dakota State Medical Association have paid their A.M.A. dues for 1950, but the number who have NOT paid is still far too large.

**VA RESTRICTS USE OF
 CORTISONE AND ACTH
 FOR OUT-PATIENTS**

The Veteran's Administration Center in Sioux Falls has informed the Medical Association office that ACTH and Cortisone will not be paid for under the contract between the Medical Association and the Veteran's Administration.

A portion of the telegram reads, "Until revised policy is developed and forwarded field stations, it is requested that you immediately contact all fee basis physicians and advise them that cortisone cannot be prescribed for VA beneficiaries at government expense."

BOOK REVIEWS*

Brain and Behavior: Induction as a Fundamental Mechanism of Neuropsychic Activity

N. E. Ischlondsky, M.D., New York. 182 pages, illustrated, price \$7.00, St. Louis, C. V. Mosby Co., 1949.

Occasionally there appears a fundamental work that is basic to neuropsychiatry and which is well founded upon anatomical and physiological grounds. Doctor Ischlondsky's book, *Brain and Behavior*, is one of these important additions to neurological and psychiatric literature. The author's point of view is well expressed in the preface, in which he makes a plea for basic research and for critical evaluation of concepts in psychiatry. The author brings into bold relief the long-standing differences of opinion between the physiological-biological and the subjective-psychological schools of psychiatric thought. He points out that convincing scientific evidence for some subjective psychological beliefs is lacking or grossly inadequate. From the author's statements the reviewer infers that some widely held psychoanalytic theories are based on faith, on uncritical acceptance of authority, and on the emotional attitudes of the analysts.

An interesting analogy is drawn between his definition of "induction," the theme of the monograph, and the cerebral physiological mechanism by which individuals lose the ability to critically evaluate. Thus he points out that the subjective psychologist, through the process of induction, after a long period becomes unable to evaluate and assess theories which he has adopted, and comes to believe, without proof, that these theories are facts. He defines "induction" in physiological terms as follows: "Every manifestation of a nervous process leads, under certain well-defined conditions, to the appearance of an opposite process." Thus if a focus of excitation is produced in the nervous system, it gives birth under appropriate conditions to a focus of inhibition — negative induction; and vice versa. The author then proceeds to give in detail a review of his own experiments which lead him to his conclusion. In this respect the book becomes almost a laboratory manual or handbook. From the detailed procedures

given one can repeat his experiments and check his conclusions.

Dr. Ischlondsky makes allowances for individual variation and stresses the importance of inherited characteristics of the individual nervous system. He also observes racial differences in sensitivity to the process of induction. A defect in the book is the writer's attempt to simplify many known physiological and psychological processes into varieties of his "state of induction." This oversimplification does not seem justifiable in the light of our present knowledge or even in the light of the author's researches.

Inferences for neuropsychiatric practice which, according to the author, can be drawn from induction, are numerous. He implies that the process of induction may underlie most if not all of the pathological syndromes seen in the neuropsychiatric clinic. Most of these are indicated as being beyond the scope of the present work and are deferred to future writing. The importance of the process and related mechanisms is discussed in relation to the psychoneuroses. Although he does not state it as such, the author also relates the mechanism of induction to the reactions of psychopathic personality. Of considerable interest is the connection drawn between the actions of statesmen and the course of world events, again in response to the psychological mechanisms involved in the process of induction.

The book is well written, and it is well illustrated with reproductions of the laboratory equipment used in the writer's experiments. It is a monograph of value to the neurologist and psychiatrist or to the resident in training in these medical specialties. It is too technical for the undergraduate medical student and while it offers much of interest to the neurophysiologist it is too mechanistic for the layman or for workers in professional fields allied to the practice of psychiatry. The author is to be congratulated for his courage in subjecting well-known psychodynamisms to critical survey and scientific scrutiny at a time when the acceptance of psychodynamisms without such scrutiny is widespread. Dr. Ischlondsky's book represents an important milestone in psychiatric progress.

GEORGE N. THOMPSON, M.D.
Los Angeles

*Reprinted from *Annals of Western Medicine and Surgery*.

The Mask of Sanity

Hervey Cleckley, M.D., Professor of Psychiatry and Neurology, University of Georgia School of Medicine, August, Georgia. 2d edition. 569 pages. St. Louis, C. V. Mosby Co., 1950. Price \$6.50.

Dr. Hervey Cleckley's "The Mask of Sanity" is a readable book. The author has something worthwhile to say and couches it in a literary style which attracts and holds the reader's pleased attention.

"The Mask of Sanity" takes as its field that confused mental area between obvious sanity and obvious insanity — an area where every keen observer of human conduct finds himself obliged to place many of his fellow human beings. These people, in Dr. Cleckley's opinion, are seldom understood and have never been properly described. Neither has adequate provision been made for their care by physicians in private practice or in institutions. These people do not fit into the ordinary categories of neuroses and psychoses. They are so near sane that we try to treat them thus, yet their psychopathic handicaps prevent them from living absolutely normal lives. Dr. Cleckley discusses such individuals clearly, fully, convincingly and, what is more, with a delicate sense of humor which one soon begins to watch for.

Dr. Cleckley first outlines the problems of near sanity or near insanity. For want of a better term he calls the near sane or the near insane person a psychopath, further identifying him as the "forgotten man of psychiatry."

Next he describes elaborately twelve or fourteen such cases, most of which will stir memories of similar problem personalities in the reader's experience.

But case histories are the mere "material" of Dr. Cleckley's book. Boldly he discusses them from an exceedingly broad viewpoint, working out thereby a very good argument for his theory of the origin of such psychopathies. The following quotation will illustrate this point:

"Only very slowly and by a complex estimation or judgment based on multitudinous small impressions does the conviction come upon us that, despite these intact rational processes and their consistent application in all directions, we are dealing here not with a complete man at all but with something that suggests a subtly constructed reflex ma-

chine which can mimic the human personality perfectly. This smoothly operating psychic apparatus not only reproduces consistently specimens of good human reasoning but also appropriate simulations of normal human emotion in response to nearly all the varied stimuli of life. So perfect is this reproduction of a whole and normal man that no one who examines him can point out in scientific or objective terms why he is not real. And yet one knows or feels he knows that reality, in the sense of full, healthy experiencing of life, is not here."

This is a browse book rather than one to read straight through although the first four chapters should be read to begin with. Thereafter two or three case histories should be read carefully. Next the "Attempt at Interpretation" beginning on page 395 should be clarifying.

Something should be said of the total effect of the book on the reader. One feels both edified and disturbed. Edified because he has read a book which has a point and has pretty well made it. Disturbed because of the possible inferences contained in it. Even its title can become upsetting. It calls to mind that ancient jingle:

"I wish I were a moron
Who doesn't give a damn,
A happy little moron . . .
My God! perhaps I am!"

ROSSMOORE, M.D.
Los Angeles

GULLIBLE'S TRAVELS

(Continued from Page 363)

the North Central Conference, also the Sunday meeting of the Conference.

Following week took a few days off to visit the family and go home for a good old fashioned Thanksgiving dinner. This meant driving to Michigan and much snow and ice.
November 28

I spoke to a Study Club of Jefferson School PTA in Sioux Falls.

November 29

Drove with Dr. Pankow and Dr. Lyndon King to Aberdeen to attend the district meeting. Returned the same day so that I would be able to get one day in the office before leaving for the White House Conference and the National Education Campaign of the AMA in Cleveland.

This is



DECEMBER
1950
Vol. 3 No. 12

YOUR MEDICAL ASSOCIATION

PUBLISHED MONTHLY BY THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION

A.A.P.S. LISTS RULES FOR 1951 ESSAYS

The Association of American Physicians and Surgeons has just announced the rules for their Annual Essay Contest on "Why the Private Practice of Medicine Furnishes this Country With the Finest Medical Care."

Rules are as follows:

1. Junior and Senior High Students (7th, 8th, 9th, 10th, 11th and 12th Grades) from all public and parochial schools located in the United States are eligible to enter the Contest—except sons and daughters of physicians.

2. Essays must be limited to 1500 words.

3. Essays should be written on one side of letter size paper (8½ x 11) and if typewritten, double spaced.

4. Contest starts January 1, 1951 and essays must be submitted on or before March 1, 1951 to:

- (a) County or local medical society or auxiliary sponsoring Contest; or to
- (b) State society or auxiliary sponsoring Contest (in the event no county or local group sponsors it); or to
- (c) Association of American Physicians and Surgeons, 360 N. Michigan Avenue, Chicago 1, Illinois, in the event no Con-

test is sponsored by either a county or state society.

5. First three prize winning essays from each county or medical society must be sent to:

(a) The state medical society on or before March 15, 1951 (if it is sponsoring a state Contest) to compete for state awards; or

(b) To Association of American Physicians and Surgeons on or before April 1, 1951, 360 N. Michigan Avenue, Chicago 1, Illinois, to compete for national awards (in the event no state contest is held).

6. First three prize winning essays from each state must be sent to the Association of American Physicians and Surgeons, on or before April 1, 1951, 360 N. Michigan Avenue, Chicago 1, Illinois, to compete for national awards.

7. Compositions must be original and should be well documented.

8. JUDGING: Will be based solely on knowledge and grasp of the subject supported with documentation, sions.

9. JUDGES: For county and state Contests and the national Contest: A physi-

cian, an educator, and another person, all of whom shall have some special knowledge of the subject.

NEWS NOTES

Dr. Wayne Geib, Rapid City, presented and narrated a film on early detection of breast cancer at a meeting of the A.A.U.W. at the Alex Johnson Hotel.

* * *

The United States Public Health Service has presented a renewal grant to **Dr. Earl B. Scott**, Ass't. Professor of Anatomy, and **Dr. Charles Schwartz**, Research Associate Professor of Biochemistry at the University Medical School for their work on the relationship of essential amino acid, calcium metabolism and cancer.

* * *

R. E. Jernstrom, M.D., vice-president of the State Medical Association spoke to the Rapid City Pharmaceutical Society on his recent trip to South America where he attended a surgical meeting.

* * *

R. L. Ferguson, M.D., for three years head of the Department of Pathology at the University of South Dakota resigned on November 1, to practice in a Japlin, Missouri hospital.

The Cancer Society of the State of South Dakota has awarded \$2,000.00 for a continuation of the study of the phyto-pharmacological effects of cancerous blood to the University of South Dakota Medical School. The project is under the direction of **Dr. Donald Slaughter** and **Dr. John Winter** of the Department of Botany.

* * *

The State Tuberculosis Society has made an award of \$500.00 to **Dr. H. M. Carlisle**, Chairman of the Microbiology Department at the University for a project devised to improve diagnostic methods in tuberculosis.

* * *

The 25th Annual Congress of Anesthetists, a Joint Session of the International Anesthesia Research Society and International College of Anesthetists, was held at the Schine Hotels' Roney Plaza in Miami Beach, Florida, October 30th to November 2nd, 1950.

The session honored Dr. Wesley Bourne, formerly Professor and Chairman, Department of Anaesthesia, McGill University, Montreal, Canada.

Mayor Harold Turk of Miami Beach gave a welcoming address to the group on the first day of its session.

The following are the members of the board of Governors who presided over the daily discussion groups: C. J. Durshordwe, M.D., F.I.C.A., Buffalo, N. Y., Chairman; A. William Friend, M.D., F.I.C.A., Akron, Ohio, Vice-Chairman; R. J. Whitacre, M.D., F.I.C.A., Cleveland, Ohio; T. H. Seldon, M.D., F.I.C.A., Rochester, Minn.;

Morris J. Nicholson, M.D., F.I.C.A., Boston, Mass.; and Harold R. Griffith, M.D., F.I.C.A., Miami, Florida.

DISTRICTS MEET

Close to a hundred percent turnout of the Pierre District Medical Society was on hand at the regular district meeting at which **Dr. L. J. Pan-kow**, president of the state Association made his official visit.

The group ate at the new Falcon Cafe and then moved to the Pierre Clinic for the business meeting.

Auxiliary members held a meeting at the same time.

* * *

The Black Hills District Medical Society met at Sanator on October 26 to discuss the endowment fund being set up for the medical school at the University.

Twenty-five members attended the meeting at which **Dr. W. L. Meyer** was host. **Dr. Glen Heidepreim** of Lead presided over the meeting.

ANNOUNCEMENTS

The Institute of Industrial Health of the University of Cincinnati will accept applications for a limited number of Fellowships which are being offered to qualified candidates who wish to pursue a graduate course of instruction which will qualify them for the practice of Industrial Medicine. Candidates who complete satisfactorily the course of study will be awarded the degree Doctor of Industrial Medicine. Any registered physician, who is a graduate of a Class A medical school and

who has completed satisfactorily two years of residency (including internship) in a hospital accredited by the American Medical Association may apply for a Fellowship in the Institute of Industrial Health. The course of instruction consists of a two-year period of intense preliminary training in the basic phases of Industrial Medicine followed by one year of practical experience under adequate supervision in industry. During the first two years, the stipends for the Fellowships vary from \$2,100 to \$3,000. In the third year the candidate will be compensated for his service by the industry in which he is completing his training. Requests for additional information should be addressed to the Institute of Industrial Medicine, College of Medicine, Cincinnati 19, Ohio.

* * *

A cordial invitation is extended to physicians and surgeons in the State of South Dakota to attend a three-day Sectional Meeting of the American College of Surgeons in St. Louis on January 22, 23 and 24. The Statler Hotel will be Headquarters for the meeting and requests for hotel accommodations should be directed to the Statler Hotel in St. Louis.

The program for this meeting will include new surgical motion picture, a special program on trauma, a cancer symposium, and panels or papers on Vascular Surgery, Chest Injuries, Fractures about the Ankle Joint, Hematuria following Trauma, Neck Surgery, Osteomyelitis, Ulcerative

Colitis, Cancer of the Stomach, and Emergencies Arising During Operation. The first two days of the program will be presented at the Headquarters Hotel and on January 24 the hospitals in St. Louis will offer a full day of surgical clinics for those in attendance at the meeting.

A five-dollar registration fee will be required, except from Fellows and members of the Junior Candidate Groups of the College, and interns and residents, but we are confident that the physician or surgeon in practice will find the program worth many times the registration fee.

* * *

Reserve Medics Can Check Status

According to information received recently, if a doctor is not sure of his reserve status after service in World War II, he should contact the following, depending on his branch of service:

Army:

The Adjutant General of
the Army
Reserve Branch
Washington 25, D. C.

Navy:

Surgeon General
Bureau of Medicine &
Surgery
Navy Department
Washington 25, D. C.

Letters should contain a direct request as to whether the individual holds a reserve commission and whether or not that commission is in force at this time. The letter should also contain the writer's service serial number.

G.P.'S PLAN NEW STYLE CONVENTION

What appears to be a completely new approach to postgraduate training for G.P.'s has been announced by the American Academy of General Practice. The Academy's Third Annual Scientific Assembly, to be held in San Francisco on March 19-22, 1951, will be built around this new concept.

Briefly, the Academy reasons that in addition to an understanding of specific diseases and specific therapies, the man in general practice also needs to understand the emotioned, familial and environmental backgrounds which influence the life and well-being of the patient. Through such better understanding, the general practitioner becomes a better Family Doctor.

Consequently, the program of the next Assembly will not be made up of the usual list of papers on unrelated medical and surgical conditions. Instead, it will hinge on two principle areas of interest: "Counseling Factors in Family Life" and "Functional or Psychosomatic Disorders in General Practice." One afternoon of the meeting will be devoted to a panel discussion of each subject by seven top authorities. Other speakers will discuss specific phases of these two subjects, assuring a balanced, integrated approach to each basic problem.

There will also be a dozen other papers dealing with important aspects of general practice, but even these are designed to send the G.P. home better equipped for his

role of Family Physician. Another innovation in this Assembly will be the integration of the scientific exhibits into the teaching program—nearly half of them will relate to and supplement the teaching periods on the formal part of the program.

Program speakers will include such prominent instructors as William C. Menninger, Paul Popenoe, Dorothy Walter Baruch, R. B. Robins, Walter C. Alvarez, and twenty-two other equally authoritative names in their respective fields. According to AAGP President, Stanley Truman, and T. R. Rardin, Executive Chairman of the Program Committee, every instructor is a good speaker and well trained as a teacher.

It looks as though the American Academy of General Practice may have a sound basis for its boast that this Assembly will be "the outstanding medical convention of 1951."

PAN-PACIFIC GROUP SETS MEETING DATE

The Council of the Pan-Pacific Surgical Association has set the fifth meeting to be held in Honolulu, November 10-21, 1951.

Honolulu lends itself toward providing excellent facilities for the conference, as well as contributing to the pleasures of a real vacation. Plans are now under way to make it the biggest and best that has yet been held.

November is one of the most pleasant months of the year in Hawaii. The accommodations are at a premium, however, the Pan-Pacific

Surgical Association has been named a travel agent and not only can it secure preferred accommodations for its doctors, it can also effect a savings on travel and hotel accommodations.

The President of the Association recommends that doctors take advantage of the four and one half day trip on the S. S. Lurline with its deluxe accommodations, climaxed by the royal Hawaiian welcome.

Anyone interested in combining a vacation with an excellent surgical meeting should contract the Pan-Pacific Surgical Association, Suite 7, Young Building, Honolulu 13, T. H.

ABERDEEN DISTRICT MEDICAL SOCIETY MEETS

About 40 members and guests attended a dinner meeting of the Aberdeen District Medical Society held in the banquet room of the Sherman Hotel in Aberdeen on Wednesday evening, November 29th. **Dr. L. J. Pankow**, President of the South Dakota State Medical Association, made his official visit to the Society and discussed state association problems. Executive Secretary **John C. Foster** outlined progress made in organizing the South Dakota Heart Association.

Featured speaker of the evening was **Dr. C. D. Creevy**, head of the Department of Urology of the University of Minnesota Medical School,

Minneapolis, Minn., who gave a very interesting talk on "Hematuria" illustrated with numerous lantern slides. The Society passed a motion approving the addition of fluorides to the Aberdeen City water supply for the prevention of dental caries, and also presented a gift to one of its younger members, **Dr. J. N. Berbos**, Aberdeen, who left the following day for service in the medical corps of the Marines.

G. P. ACADEMY PLANS MEETING JANUARY 13

We have had letters from many members of the Academy of General Practice relative to the place of the annual meeting. All but one or two of the members wish to meet at Huron at the time of the next meeting of the Council of the Medical Association. It has been suggested that the Academy members come one day early, have a dinner together Saturday night, then have their first meeting with election of officers that evening. It seems to me that this would be a good arrangement. The date of the Council Meeting at Huron is January 14, 1951. Therefore, the date of the dinner for the Academy Members would be January 13.

NORTH CENTRAL CONFERENCE URGES CONTINUANCE HOSPITAL STANDARDIZATION

WHEREAS, the American Hospital Association recently

proposed to establish a hospital standardization program of the purpose of accrediting hospitals for internships and residencies, and

WHEREAS, such a program would constitute a duplication of the program conducted for nearly 25 years by the American College of Surgeons and the American Medical Association, both of which have indicated no intention of discontinuing their efforts in this field, and

WHEREAS, the evaluation of medical staff and patient facilities required for satisfactory intern and residency training is a function of medical education more properly entrusted to professionally skilled medical personnel rather than lay trustees and administrators of hospitals, and

WHEREAS, the American Medical Association and the American College of Surgeons have under consideration certain changes for the improvement of hospital standardization procedures,

THEREFORE, BE IT RESOLVED BY THE NORTH CENTRAL CONFERENCE that it express complete support of plans to continue the hospital standardization program under the direction of the American Medical Association and the American College of Surgeons, and

BE IT FURTHER RESOLVED that copies of this resolution be sent to all state medical associations, the American Medical Association, and the American College of Surgeons.

PHARMACEUTICAL DIVISION

Charles F. Van De Walle, Editor

BY GUESS OR BY GUIDE

by J. W. Lansdowne, Asst. Mgr., Trade Relations Dept.
Eli Lilly and Company

During the past eight or ten years, business conditions have been good. Even so, since 1947, drug-store proprietors have been experiencing more and more difficulty in operating their businesses at a profit.

Some arguments hold that monetary factors are responsible for the over-all decline in retail sales. Others blame malproduction, overproduction, scarcity of capital, underinvestment, or overcapitalization, as well as a host of other factors. In the light of our present knowledge, there is no simple explanation. Our management problems remain individual problems, and like all economic life are affected by vast and complex forces.

As manager of your business, you are charged with the responsibility of making decisions based on your own best judgment. In making your business decisions, you will find statistical information extremely valuable management information, because business judgments which are well informed will be better judgments than those which are not well informed.

In discussing the current trends in the trade, it is certainly not my intention to try to tell you how to run your business. I propose to discuss the interpretation of dependable drug-store operation figures and present them in the spirit of helpful service with the hope that you druggists will find the facts to be helpful in charting the course of your business future as well as in making business decisions.

Plato once said, "People have the kind of government they deserve." How well this applies to us individually—to our businesses—to our industries—and even to our local, state, and national governments. In the retail drug field as well as in any other type of enterprise, we have exactly the kind of business and the kind of ethics that we de-

serve. We are the industry; we make it what it is. Therefore, if there appears to be a lack of integration, ethics, or cooperation within our business or industry, it should be borne in mind that we are the industry and that those things which appear to be wrong or distasteful may perhaps be of our own making. Your very presence and keen interest in the affairs of this convention are evidence that you have not abdicated your good judgment by supporting the industry's ever present purveyors of fear—rabble rousers—and gossip mongers, but rather that you prefer to follow leadership of your own choice—leadership which beckons the way rather than points the way.

During the lush war years, most of us were lulled into a sense of false security. The rude awakening came in 1947, when the big bouncing ball of business which used to rebound to the faintest touch was found to require a harder and more vigorous blow to cause it to bounce back again. As it now appears, our continued prosperity depends upon the fifteen million of us who are in the business of selling. It depends upon our ability to develop the most dynamic selling force that business has ever known. That selling ability must be built on the four elements which go to make big business, big men, and big industry. They are: knowledge, confidence, enthusiasm, and an honest day's work. Perhaps we have been so busy looking back upon the so-called good old days or perhaps ahead to the triumphs of tomorrow—a tomorrow which seems to never come—that we have lost sight of what it had at hand today and why dynamic selling and competent service appear to be profoundly important.

It is imperative that we develop the potentialities of our present economy or otherwise suffer the consequences. We are

in an entirely different economy today than we were ten years ago. Startling changes have taken place in our commercial as well as our social life. For example, 13½ million customers have died since 1940. That is nearly 10 percent of the nation's prospects for all goods. Over 17 million marriages have been consummated. These millions are in the formative and accumulative stage—the richest of all markets. Once they are won, they will prove to be the most valuable of all potential customers. With slight reference to the preceding fact, 30 million babies have been born. This, of course, is the market of the future, currently ranging in age from one day to ten years, and will perhaps represent 15 percent of the nation's population by the year 1965. In the last ten years more than one-third of all of our country's families have been formed. During 1949, the average family spent about \$90 per year in a registered retail drug store. This is \$8 or less per family than was spent in 1948 and indicates deferred buying.

Of the 150 odd million people in the United States today, 63 percent are so young that they do not recollect World War I—its trying times and the lush days of the roaring twenties. Fifty-two percent do not remember a Republican administration. Forty-eight percent do not remember what conditions were like before World War II. That means that they have no inhibitions about spending and no yearning to save for the inevitable rainy day. Forty-four percent are experiencing for the first time a free market in which they can buy what they want from normal assortments. This is the new buying public and represent a big chunk of the total market. Moreover, this new buying public is becoming more important day by day.

To point out further that markets are abundant for those who go after them, authoritative sources reveal that the net national income is approximately 214 billion dollars. It represents, aside from 1947, the highest per capita purchasing power in our history. Furthermore, it is broader and deeper than ever before. There are still demands for durable goods, millions of homes, and millions of automobiles. Our industrial production remains about 180 percent of the 1935-39 average. The population increase over the past ten years means an average of

\$17,200 additional business per year for every registered drug store in these United States. Employment is still at a high level and the banking structure is the strongest in the history of our country. As a matter of fact, it is incapable of collapse. This is the present day economy—the economy we must develop if we are to increase our slightly-shrinking sales volume.

Before presenting suggestions for increasing retail drug store sales volume, I think we should first know what has taken place in the retail field during the past year. I cannot help but recall what Abraham Lincoln said of this nation and how well it can be said of our own business, "If we know where we are, we can easily determine where we shall go."

The following statistics represent an arithmetical average of the operations' figures of 1,378 drug stores exceptionally well distributed both from a geographic point of view as well as dollar and cent business volumes. With total sales representing 100 percent—the cost of goods sold amounted to 67.6 percent of sales, resulting in a gross margin of 32.4 percent; proprietor's or manager's salary allowance, 7.6 percent; employees wages, 10.5 percent; rent, 2.6 percent; and all other operations' expenses, 5.8 percent. Total operations expenses, therefore, amounted to 26.5 percent of sales. The net profit amounted to 5.9 percent of sales. The value of the cost of merchandise stock averaged \$14,178 per store. The annual rate of turnover of merchandise stock was four times, and the average profit per dollar invested in all merchandise stock was thirty-five cents. Drug stores that supplied complete reports on their prescription income filled an average of 9,258 prescriptions per store at the average price of \$1.60 each. Prescription revenues accounted for 19 percent of total sales volume.

A brief interpretation of the foregoing statistics points out that the average sales of drug stores in 1949 were lower than 1948. This is the first time since 1932 that there has been no rise in this figure over the preceding year. There was a rise last year in prescription income of drug stores. In fact, if prescription income had fallen off in 1949 at the same rate as other drug store sales, the decrease in total sales for the year would

have been nearly half again as large. The average number of prescriptions filled per drug store was less in 1949 than in 1948. Like the total drop in drug-store sales, it is the first time this has occurred since 1932. However, the rise in the average price received for prescriptions from \$1.51 in 1948 to \$1.60 in 1949 was enough to offset the drop in the number of prescriptions filled last year.

All of us know that the most secure foundation for future rises in prescription income is an upward trend both in prescription receipts and in the number of prescriptions filled. Consequently, every effort should be made to the building up of prescription practice.

Under the conditions which we now face, drug-store gross margins in 1949 remained at about the level of the preceding year. Gross margins in 1948 were 32.6 percent of sales; the average for 1949 was 32.4 percent of sales. From the deep depression year of 1932 down into the postwar inflation of 1949, this measure of difference between the cost and selling price, which is called gross margin, has stood at about the same level. In all of these years it has remained within the range of 32 to 33 percent of sales. The drop in profits in 1949 was due, therefore, to the rise in expense rate. Despite the failure of total sales to keep on going up in 1949, there was a rise that year in both the dollar amount and the percentage of income paid for store expenses. Particularly noteworthy is the fact that the drop in net profits in 1949 was five and one-half times as much proportionately as was the decrease in sales. The merchandise stock investment kept on rising in 1949 although sales leveled off compared to the year before. This rise carried the merchandise stock investment to the highest peak yet reached. As a result, the annual turnover dropped from 4.2 times in 1948 to 4.0 times in 1949. As you know, this figure is obtained by dividing the cost of merchandise sold by the merchandise stock investment at cost. Also, the net profit per dollar invested in total merchandise stock went down from forty cents in 1948 to thirty-five cents in 1949. This is a fall about 15 percent. These figures are obtained by dividing the year's profits by the cost value of the merchandise stock.

The rise in prescription department merchandise stock, incidentally, was less than half as much proportionately as was the stock in the rest of the store. The rise in prescription income was almost enough to offset the stock increase in the prescription department. Consequently, the prescription stock investment for each dollar of prescription income rose only from 22.7 percent in 1948 to 23.6 percent in 1949. Last year was, therefore, a year of new peaks in merchandise stocks and store expenses. Gross margins held up but sales aside from prescription income were off.

Even in the prescription department, there is an indication of an end to the continuous gains year after year. The prescription department income rise in 1949 was due to an increase in the average price received for prescriptions. Unlike former years, the average number of prescriptions filled per store did not go on to a new high. Future success in the operation of a drug store will come, it seems, from now on from the individual efforts of its owner. It will not be enough to set back and be carried along by the upswing in all business activity. Those years are drawing to a close. Prescription filling has always been a source of professional pride and satisfaction to drug-store owners. A busy prescription department, as you know, is the best safeguard against declining profits. One of the most encouraging facts that has been revealed is the prescription filling in a drug store is highly profitable activity. This is to be expected. One who gives time, money and energy to obtain a license to practice pharmacy is likely to be far more skilled in the profession than he is in any branch of the retail trade or in any other occupation he may enter. The income he obtains from prescription receipts is high for the dollar invested. The professional services supplied in filling prescriptions result in a margin above cost of material and supplies which is 1½ to 2 times as great as the average general margin of other drug-store sales. The average price received from prescriptions is now and has been for many years higher than virtually every other sale made in the store. Opportunities for successful operation of a prescription department are to be found in communities of all sizes, and prescription receipts

are a source of year-round income and profit.

I suggest emphatically that you do everything you possibly can to increase prescription revenues in your store. First, as the number of prescriptions rises, the prescription sales revenue for each dollar invested in prescription stock goes up. Second, there is a decided tendency with an increase in prescription sales for there to be a rise also in the average net profit in all store merchandise. Third, it is not necessary to make a huge investment in merchandise stock to take care of a large amount of prescription business.

Because drug-store management and operation problems are individual problems, it would be an insult to your intelligence to try and lead you to believe that the over-all garden variety of promotional programs would be 100 percent applicable to your individual case. You and you alone understand the people of your community better than anyone else. Likewise, they perhaps are thoroughly familiar with your personality. Consequently, a business promotional plan, a merchandising plan, a sales plan, or a plan to increase prescription revenues should center right around the individuality of your own store.

It is well, however to have several basic facts in mind when your promotional program is formulated. First of all, you are in business to make a profit, honestly and justifiably. One of the most valuable assets in retail business or in any other field of endeavor is a satisfied customer. He is the one who will represent repeat business for your store. It should be thoroughly understood that profits cannot be bought. Opportunities for profit come only with the sale of goods.

In buying for the retail drug store, remember that goods are bought for the purpose of resale at a profit—not speculation. A progressive business concern will always have a buying policy—a method of buying whereby purchases are kept in proper ratio to sales. A sound business saves money for reserve capital. It also has established business policies from which there is no deviation—for example: either cash or credit business, procedures for handling returned goods, deliveries, and the like. Successful store

operators do not sell at a loss, nor do they participate in vicious price cuts. Management has complete knowledge of costs, both merchandise and operations. A healthy business is competitive, but not selfish. It will co-operate. It will live and let live. Retail stores in the higher net profit bracket see to it that every department is a paying department. Stores are properly departmentalized, and each department has the benefit of proper records. Also, successful stores apply sound accounting principals to their businesses. They keep adequate records. It is interesting to note that 87 percent of all retail drug-store failures do not have adequate records or acceptable bookkeeping methods. A sound and progressive business has an established sales-training program for all employees. Such a program provides the opportunity for the entire personnel to gain knowledge—knowledge that will inspire confidence of physicians and customers alike—confidence that will build greater enthusiasm—which in turn usually results in an honest day's work.

It has indeed been a pleasure to once again participate in the activities of your state convention—to renew acquaintances—meet old friends—and especially for the opportunity for making new friends. With my very best wishes for the continued success of each and every one of you, I would like to leave this thought with you. It is an old Swedish proverb: "Fear less, hope more; eat less, chew more; talk less, say more; hate less, love more; and all good things will be yours."

NEWS NOTES

The seven Aberdeen stores are running a series of full page "Try the Drug Store First" advertisements in their local paper for the holiday season. Each store has their own ad but all are combined on one page. This is an example of their excellent spirit of co-operation since they have established the Aberdeen District Pharmaceutical Society. Officers of the society are: **A. O. Bittner**, Pres.; **S. L. Mark**, Vic-Pres.; **James Anderson**, Sec.-Treas.; **Patricia Procknow**, Corresponding Sec.

J. R. (Bob) Vander Aarde has been called to active duty as 1st Lieutenant in the Infantry effective October 20. Bob has been a phar-

macist at the Van De Walle Pharmacy since graduation from State in June 1950 and as an apprentice during his vacation periods the previous summers.

The Rapid City Pharmaceutical Society held their regular monthly meeting, November 7, at the Alex Johnson Hotel. **Dr. Jernstrom**, a local physician, favored the group with an interesting discussion of his recent air trip to South America.

A Dutch Lunch was served following which the group held a business meeting. Several Legislative items were discussed and plans were tentatively made for a dinner dance to be held sometime after the First of the year.

VETERAN FLANDREAU PHARMACIST IS DEAD

Flandreau, S. D., Nov. 11—A heart attack which he suffered late Friday was fatal in the Flandreau hospital today to Walter L. Rolfe, 69, pharmacist here the past 45 year. Funeral services will be held in the Episcopal church at 2 p. m. Monday.

A native of Mower county, Minnesota, Mr. Rolfe was married to Lillian Spafford, daughter of the late Dr. S. A. Spafford. The widow survives, together with one son, William S. Rolfe, Bemidji, Minn., and three grandchildren.

DEFENSE FOR A-BOMB WAR IS DISCUSSED

CIVILIAN preparedness is coping with fatalities resulting from an atomic bombing was discussed by **Dr. M. R. Gelber** Friday night, October 28th, at a meeting of the Aberdeen Pharmaceutical society, held in the Sherman hotel.

His address also delved into some of the theoretical aspects of nuclear fission and its application in producing the atomic bomb.

About 50 attended the meeting, including a number of out-of-town guests. These included Floyd Cornwall, Webster, president of the South Dakota Board of Pharmacy; Herb Crissman, Ipswich; Bud Rodman, Eureka, and Al Wagner of Walgreen stores, Chicago.

Dr. Gelber stressed the importance of decentralization of industry and population as necessary to avoid crippling damage from atomic attacks. This was graphically illustrated by the destruction wrought by the bombs in Japan, he pointed out.

Aberdeen is not likely to be a target for atomic bombs in case of war, the speaker declared, but should be prepared to assist other cities which might be targets. This assistance would be in the form of providing housing and accommodations for evacuees from larger cities and having a mobile medical unit equipped to go to the aid of stricken areas.

THE POSSIBILITY of stockpiling whole blood and plasma seems remote, Dr. Gelber said, because of the huge amounts involved. A large percentage of the casualties from an atomic bombing are burn cases and blood transfusions are an important phase of the treatment.

Probably the most important part of preparation for atomic warfare, the speaker pointed out, is educating the public as to what to expect in case of bombing and what to do to hold down the casualty rate.

BOOK REVIEW

Physiology of Heat Regulation and the Science of Clothing

L. H. Newburgh, M.D., editor, Professor of Clinical Investigation, Medical School, University of Michigan. Prepared at the request of the Division of Medical Sciences, National Research Council. 457 pages, illustrated, price \$7.50, Philadelphia, W. B. Saunders Co., 1949.

This monograph is of interest to every physician and any other person who complains about the weather. From it he can learn why he feels uncomfortable when it is warm and dry or hot and damp, or cold and dry or cold and damp, what his body does about it, and how he should dress. There is an excellent anthropological introduction on how primitive people meet extreme climatic conditions. The description of arctic life among Eskimos and Arctic Indians is fascinating.

Clothing is paraphrased as a thermal barrier. I never thought of it as such but I can think of no more apt definition.

The articles described the various aspects of heat regulation in a most scholarly fashion. The contributors are outstanding authorities in their respective fields. This is an interesting volume of eminent appeal to a limited audience, and of limited interest to the general reader.

F. W. S. MODERN, M.D.
Long Beach

Socialized Medicine

by

John C. Foster*

Mr. President, Members of the South Dakota Pharmaceutical Association:

I do not feel that the title that appears in your program is quite accurate. I do not feel that socialized medicine is a topic because socialized medicine is only a small portion of socialism, or, if you will communism; and step by step the United States is going down that trail today to complete socialism. I do not think that the doctors in South Dakota or in the nation should necessarily be the ones to battle socialism under the guise of socialized medicine, while the others stand back and say, "a fine job" or "poor job," "you should have done this," or "you should have done that," or something to that effect, while they themselves are apt to fall in line next.

I am extremely worried over the gullibility of the public when they plan into the hands of the people that would communize this country, or the people sympathize with them. I do not believe that the people who promote socialistic schemes are necessarily made up of groups that have an alterative motive. I believe that a lot of them are very sincere; that they feel they ought to do something for the United States and they are going about it in this manner. They don't know what they are doing.

We have a lot of talk, a lot of written words, a lot of radio programs, a lot of everything on socialized medicine. Basically, socialized medicine or compulsory health insurance—which is perhaps a more accurate name—is this: The public will pay through a pay roll tax deduction, or if self-employed through a certain percentage of net income to a fund. This fund in turn will return to the individuals complete medical care. That is basically the story, and that is how it is sold to the public. For instance, they say for one and one half percent of your income, taken out just as social security if you are employed, or two and one fourth percent

taken out if you are self-employed, and one and one half percent from the employer, will provide you with a complete medical program. That sounds very good to the average layman. The man that works at two hundred dollars a month, or twenty-four hundred dollars a year, can easily figure that one and one half percent is only thirty-six dollars a year. He knows that his average doctor bill has been running around eighty dollars a year, so he says to himself, "I can have a saving here of nearly sixty dollars a year by going into this government plan." Let's analyze just exactly what the government is offering in socialized medicine. I am not going to stick to medicine all the way through here because pattern follows through in other fields, other professions, other businesses. In medicine, however, the plan has been sold to the public this way. It will provide something more than the money you invest, but actually what happens? The money you invest is only a small portion. Mr. Oscar Ewing, the federal security administrator, has published a one hundred and eighty six page book, which tells about the plans to socialize medicine. In that book he lists a number of things that are included in the various bills that have been introduced that have never been publized. Number 1. This one and one-half percent of the payroll, plus one and one half percent—employers' contribution—will set up the program over a period of three years. During the three years it will give nothing to the insured unless there is money left over. I presume, to set up a health organization in a city the size of Sioux Falls, it would require three hundred more government employees than we have today. That is just a guess. It may be a low estimate. They would set this up in a three year period without guaranteeing the individual any medical care for his insurance dollars. Now, if an insurance man was giving this talk, or if there was an insurance man in the crowd, I am sure he would agree that no

* As delivered before the South Dakota Pharmaceutical Association Convention in Sioux Falls, on Wednesday, June 14, 1950.

insurance salesman could sell a policy with a three year waiting period. Yet, that is what is in all of these bills that have been introduced in Congress—that is the Ewing plan, and we are asked to swallow it. The public eats it up because they have not been told differently. Furthermore, any and all money to come in, and they may increase the deduction after three years, will be put into a fund and all medical care provided, with the exception that if the funds are not available to provide full coverage, such coverage will be pro-rated among the recipients. In other words, if that were an insurance company they would merely say, "if we don't have money on hand at the time you have a claim, we will pay what we can." You wouldn't buy insurance with that kind of a proviso in it. Yet, the Federal government would compel you to buy that kind of insurance under socialized medicine.

Survey after survey has proved that the public is not interested in any of these socialistic schemes; such as compulsory health insurance, cradle to grave social security—public power, which we are interested in here in South Dakota, and many others, yet, these people individually will either subscribe to these plans, or support the individuals who will put these plans into motion in the very near future. I mean by support, voting for them, and don't say that the medical profession is getting political because John Foster got up here and talked politics on socialized medicine. Certainly, we are political. It either that we survive through politics or we do not survive; and it is the same for every man sitting in this room. You can't sit apart from it and say that it is political, I won't touch it, because politics enters your every day business world. You can't go along without it. I notice in the paper that the druggists are forming an auxiliary organization which is legislative. That word legislative is a grand cover up for political, but don't shy away from it. It is honest, it is the only way you will get anywhere in supporting your side of any of these political questions. These people that support the socializers unknowingly have played into this plan I call "step by step socialism."

The Medical profession can take a great deal of credit for defeating the actual so-

cializing bill in the eightieth congress; and seeing to it that it wasn't even brought up in the eight-first congress. As one of the men, Dingel of Michigan—who was one of the sponsors of the Wagner Murray Dingel bill—said, "They have licked us on the whole bill, there is no reason now for us to hesitate about starting our program of getting these different things one by one." In other words the public does not want socialized medicine, it doesn't want socialism, but it will accept one thing after another — federal aid to education, disability insurance for those who are off the job a certain number of days; free medical care for disabled people; medical care for dependents of veterans, not the veterans themselves; and so on. All of these things are steps that socialized medicine would have as a whole, and Dingel has admitted that is now the procedure. It is the same procedure that Hitler used and that our friend, Uncle Joe, is using over in Russia today.

A year ago this coming September, President Truman special interests would try to wreck the fair deal. The "special interests" are those selfish people who want their own interests put above the interests of the public. That speech bothered me because it sounded mighty good. The average guy working in the plants and on the farm said, "That's right, those special interests are really ruining our country." It's the National Association of Manufacturers, the American Medical Association. It is those special interests, but they didn't go far enough—who are the special interests? Yes, the National Association of Manufacturers is a special interests, the American Medical Association, the American Pharmaceutical Association, Farm Bureau, the Grange, the Farm Union, the Federation of Women's Clubs, the Aged—they want something to protect them in their old age. You can go down the whole list, and if you can find anyone who doesn't belong to a special interest groups, he probably has a tomb stone six feet above his head—and he may have a special interest, I do not know. There just aren't any groups that are not representing special interests, or they wouldn't be groups, but Mr. Truman has tagged that on to certain groups that he doesn't like. In other words, he is asking that his opposition roll over and play dead.

The opposition, I assure you, is not going to play dead. That is what he would have them do because they do not agree with his program. President Truman, in that talk a year ago, stated the public give him a mandate to put in the Fair Deal. I will argue that until that place freezes over, because the mandate came from the labor—the special interest that wanted to repeal the Taft Hartley Act; it came from the farmers who wanted full parity - a special interest group - it came from pensioners who wanted increased pensions - a special interest group - and it came from a couple million governmental employees who wanted to hang on to their jobs - a special interest group. Those are the special interests, the majority of minorities that elected the fair deal the second time.

Throughout the history of this whole program we have found that dictators, or would be dictators, have always picked on this program to socialize some field of endeavor that will get them into every home; and naturally medical care is the number one field because every family has a sickness at one time or another, If nothing else, they have a doctor come, or a mid-wife, if you will, when someone is added to the family. Some medical care is received by every family in this nation in a life time. If government controls the medical care, they will have a finger in every home in the land and that of course is what the socializers want.

I am talking generalities here because in thirty minutes I cannot do much else, but I have seen it work. I have seen their methods. A couple of years ago there was to be a Health Work Shop to be held at Nemo in the Black Hills. At that time I asked if I could attend, and I received this answer from the person who was the General Chairman for South Dakota, "I am sorry, but because of your affiliation with the State Medical Association, and because of your position in the past on certain things, we do not feel that the Medical Association should be represented at the conference." Who should be there, if not the Doctors? That bothered me a lot so I went to work on them. I offered to give the story to the public press in South Dakota of why I could not go to a Health Conference in South Dakota. I and a number of others were in-

vited to represent the Medical profession at Nemo. I never did receive a notice of the time of the meeting, or the place, or the set-up. I did send a check for my registration fee, which never cleared back through the bank—and I waited. Finally, about five days before it had originally been scheduled, the tentative date, I called this lady and said, "I am a little worried about your Nemo Health Conference. I have been invited, I have paid my registration, but it looks to me like I am not going to know when it happens." She said, "Just a minute I want to read you a telegram I just received, and this is the reason why we have not set a date yet. This is from Elin Anderson of the Federal Security Administration, Chicago Office. 'Plan to postpone indefinitely your Health conference unless Mayhew Derryberry, of the public health service is there to indoctrinate your discussion leaders.'" This is in the United States, not Russia — "to indoctrinate your discussion leaders!" Who were those discussion leaders to be? Most of them were state and federal employees, who drew all or a portion of their income from the Federal Security Administration - from your pocket—but they were going to be indoctrinated by Mayhew Derryberry. Their meeting was never held, at least that particular meeting. They did hold another one in Nemo later, at which time we flooded the place with doctors of medicine. We got them out of their offices and said, "You go to the Nemo Health meeting," and every time a resolution came up favoring socialized medicine, the majority of them voted it down and passed another resolution opposing it. Consequently, out of the Nemo Health Conference came a resolution opposing socialized medicine in North and South Dakota. It was a joint conference. That is the technique they have used. What is even more dangerous about the technique is, that when it is exposed—nothing is done. They held one of those conferences in Jamestown, North Dakota. At that time government employees spent your money traveling from Washington, Kansas City, and Chicago, to attend that meeting and be discussion leaders—that was the very first one. The Harness Investigating Committee investigating illegal expenditures in government departments, found enough evidence in that one meeting to hand

over the information to the Attorney General to press an indictment to get these people fired, fined, or in jail if necessary, for illegal expenditure of your tax money. They in turn handed it over to Attorney General Tom Clark three years ago. There has never been an indictment; there has never been a motion to move it off the desk by either Tom Clark or his successor. We hear, through the "grape-vine" that this was a presidential order. For a few of these men it got a little warm and they quit their jobs, but obtained jobs in other organizations working for the same things. Mr. Harness, an Indiana Republican, discovered that the wealth of the nation was behind his opponent in the next election, and he was defeated. Your tax money defeated Mr. Harness of Indiana who had uncovered the illegal expenditures in Jamestown, North Dakota. Now the whole thing, it isn't just the fact that they were promoting socialized medicine with your money—that fact in itself is bad enough, but the cover-up they used, the white-wash—the same white-wash that is applied to the Hiss deal is the same as was used in this thing in North Dakota. It is something to think about, it is something to worry a little about because it isn't medicine alone.

What happens after the Doctor is socialized? He is put under rigorous control. He is told first of all that he can take so many patients at so much per patient. Then later on when they discover, as they have in every place it has been tried—in England, France, Germany, and New Zealand, that the Doctor makes more money than he has ever made before, they put him on a maximum salary. If they find that the Doctor is over-burdened by neurotics, and everything else that can possibly run into his office, and that too many prescriptions are being issued (of course under socialized medicine they buy the prescription for the patient, it is complete medical coverage) they clamp down on both the Doctor and the Druggist. They tell the druggist that he can charge so and so for this particular drug, and they tell the Doctor that he cannot prescribe certain drugs that cost too much money. Now you say that is conjecture on my part. It is not. The Veterans Administration has socialized medicine and we are helping them with it, the drug association is helping them with

it, At the same time we have been told that one Doctor who prescribed penicillin in a case of malaria—was told that the penicillin would not be paid for by the Federal government because penicillin is never used in malaria. I am not a doctor so I do not know. I do presume that penicillin is not indicated in malaria because all the literature says so, however, the Doctor using his own best judgment may have wanted to get rid of a side infection to more directly attack the malaria with the approved drugs for malaria. At any rate, the VA refused to pay—until it was taken to Washington and they were made to pay—because we do not feel that even in socialized veterans medicine do they have a right to tell the Doctor how to practice. That is an indication, as you can see, of what could happen, only instead of the one or two cases like we are getting today, it would happen day in and day out until finally the government would come out with a list of approved drugs that could be prescribed for certain diseases, and of course your ceiling limit. If this didn't work out, if they didn't get full cooperation from the druggists, doctors, they would set up their own dispensaries. That has been the history in every case, and it is something to worry about. It is something to do something about.

In the United States, if socialism comes, it will be because you and I have been complacent about it. Complacency has been the fore-runner of socialism everywhere. That is the fear I have now. That fear of complacency is greater to me than any fear I might have for the atomic bomb. I sat on the Governor's committee recently to discuss what could be done if an atomic attack happen in South Dakota, or nearby, because we have to train our doctors to take care of radiation burns and other traumatic injuries. The Governor was a little worried because he felt that any publicity on this might cause hysteria. I do not believe so. I believe it is smart to be prepared. However, I am not worrying about the bomb dropping on the Twin Cities nearly as much as I am on our complacency which will lead to something more devastating than that bomb if we aren't careful.

I would like to close with a few comments on what can be done. I feel like labor organizers who say you have to get political. We

have been informed that the average druggist is a little bit reluctant to talk politics, to talk issues to his customers. After all, he has a right to be reluctant. He might drive a customer or two from his store. I do not believe that the few losses he may incur will jeopardize his business and his practice of the profession of pharmacy nearly as much as in-action will jeopardize his complete profession at a later date. It is something to think about. It is something for you all to set as a goal a campaign—to inform the public. The Medical profession was lax, we waited a long time before we started to move, but now we are moving. Everybody that can read is welcome to have a piece of AMA literature, telling them of the evils of socialized medicine, and what can be done to provide for the costs of Medical care voluntarily.

I am not going into the issue of voluntary health insurance. Of course that is our main fight, we want to see voluntary health insurance in the hands of the public.

When a person is insured with a private company, he is not going to want the government to sell him inferior insurance at a greater price. All I am asking other professions and other groups to do, is to bring to the attention of their people the falacies that have been presented to them by the government propagandists.

The American Medical Association was attacked by Oscar Ewing for spending two million dollars, fighting socialized medicine, yet the Federal Security Administration spent thirty-three million dollars on the other side of the question. The horrible part of it was—that thirty-three million dollars was tax free American tax paid dollars, whereas the two million that the American doctors spent was taxable earned dollars. There is quite a difference. For our two million we have gotten fifteen times the benefit of their thirty-three million because we have licked them a couple of times. But—the battle isn't over, and it is up to every business man, every professional man, to see to it that something is done, that the public is informed, and that our legislators and congressmen are informed because they do not know. We have statements from Senator Mundt, Senator Gurney, Senator To-Be Case, Representative Lovre, and E. Y. Berry that

they are opposed to any scheme of socialized medicine or any scheme that socializes any other profession or business—but when they go down to Washington, they miss things. We have to inform them. There is too much work down there for one man to have his finger on everything. It is up to the people at home to remind them. We do it. We try to act as watch dogs, but it takes not only a watch dog, but it takes people to keep in contact, keep reminding them. They say they are opposed, lets keep them that way. Let's not have sixty Farm Union members run down to Washington in a bus and convince them that six hundred thousand people at home believe as they do. It is something that we must worry about because it is a basic problem of economics, either we have free enterprise and a capitalistic system, or we don't. There is nothing wrong with the word capitalism. Let us keep it, it is a good word—otherwise we will get socialism.

BOOK REVIEW

Water and Salt Depletion

H. L. Marriott, C.B.E., M.D., F.R.C.P., Middlesex Hospital, London, England. American Lecture Series, No. 32. 80 pages, price \$2.00, Springfield, Ill., Chas. C. Thomas, 1950.

This concise monograph provides an excellent discussion of sodium chloride and water depletion. Both the diagrammatic and the descriptive presentation could not be more lucid. In the foreword it is stated that the material was first presented as a series of lectures in 1946, and revisions were made to bring it up to date. In spite of this the erroneous idea that cellular membranes are practically impervious to sodium and potassium is maintained and consequently there is no discussion of potassium chloride depletion. This causes the overall picture to be incomplete and somewhat distorted. It is also known now that intracellular fluids undergo fairly rapid changes in composition which affect the acid base equilibria and the composition of extracellular fluids. Such new knowledge has provided a physiological background which enables the physician to consider the constituents of both intracellular and extracellular fluid in planning fluid therapy.

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AUXILIARY ACTIVITIES

REPORT ON SEVENTH ANNUAL CONFERENCE

On November 2-3 your president-elect, Mrs. Howard Wold and I attended the Seventh Annual Conference of State Presidents, Presidents-elect and National Chairmen of Standing Committees, which was held in Chicago at Hotel La Salle.

All states, except four and the Territory of Hawaii, were represented by at least one officer and in most cases by both. All of the National Officers, the Chairmen of Standing Committees and the Directors were in attendance. Mrs. Harold Wahlquist of Minneapolis, the National President-elect, was Chairman of the Conference and Presiding Officer.

A different method was used in conducting the sessions this year, and according to reports from those who had attended other years, this was by far the most outstanding conference ever held. Instead of reports from each state president, panel discussions were used, with Committee Chairmen acting as Moderators and groups of state presidents were speakers. I was notified about a week before, that I was to appear on the Today's Health panel, with the topic, "Today's Health in Beauty Parlors and other Public Reading Rooms." Our talks were to be three to five minutes long, and then be able to answer any questions from the floor later. Other panels were on Organization, Public Relations, Program and Legislation. Much informative material was given by the various speakers and other points of interest were brought out in the question and answer period following each discussion.

Following the luncheons each day there were speakers. "The New Challenge to American Medicine" dealing with Atomic warfare and what can be done in case of such an attack, gave us something to think about! On Friday, guest speakers were Leone Baxter and Clem Whitaker, Directors of the National Educational Program for AMA. Miss Baxter told how we could use much of the material which is sent out from headquarters and Mr. Whitaker gave some highlights on the coming elections.

These sessions were fast moving and a great deal of material and information was given and exchanged. Many programs, year books, samples of News-letters, posters for Health Day programs etc. were on display from various states. After seeing and hearing what the other states are doing, I realized that we will have much to do before we can compare very favorably on the basis of the National Standard. Auxiliary work has changed a great deal in the last year or two.

I only wish that all the Districts could have had representatives at the conference, too. No one could have attended a meeting such as this, without being inspired.

FIRST NEWSLETTER WILL BE SENT

Since attending the conference, I feel that we definitely must revamp some of our procedures for our auxiliary work in South Dakota, in order to conform with the new policies of our National Auxiliary. After all, if we want to be a component part of this fast growing organization, we will have to get busy. We have been more or less coasting along for a long time, but the time has come when we will have to have some definite action. The first thing to do is to get some information about our proposed changes, out to the individual members.

With this object in mind, we are scheduling an Executive Board Meeting in Sioux Falls on November 29th. At this meeting we are planning to start work on our first NEWSLETTER. Using this method we can get the suggestions and information concerning the changes in our procedures out to the individuals. We will have to get all districts to plan and work in unison.

We sincerely hope that this NEWSLETTER will reach every doctor's wife in South Dakota before the holidays!

PRESIDENT VISITS SEVENTH DISTRICT

On November 7th I was invited to the regular monthly meeting of the Seventh District in Sioux Falls. Following the dinner, Mrs. A. M. Harris, president presided at the bus-

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iness meeting. The Project Chairman, Mrs. W. Arneson, reported that plans are being started for another Health Day Program, similar to the one they conducted last year. This program, with several of the Doctors for speakers, was presented to the public with much favorable comment.

After the business session, your president spoke to the members, reporting briefly on the recent conference, and urging them to take part in all community health projects. As individual citizens, auxiliary members **can** and **should** render public service through participation in any health education being sponsored by other organizations. I suggested that there should be some period of discussion during each meeting, about some policy or some project of the auxiliary, in order to get information out to all members so they can become familiar with National policies and other timely topics, such as Public Relations or Legislation.

Thank you, District Seven, for a very pleasant evening.

Doctor, please take the Journal home so your wife can read it, too!

Mrs. A. P. Reding, President

(Continued from Page 388)

For anyone who wants a good start in the study of fluid and electrolyte exchange this little book can be heartily recommended, but the reader must not suppose that it comprises any more than a partial introduction to the subject.

GRIFFITH PAGE, M.D.
Los Angeles



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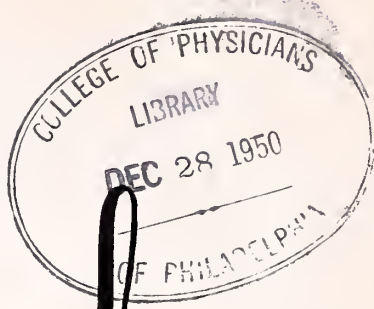
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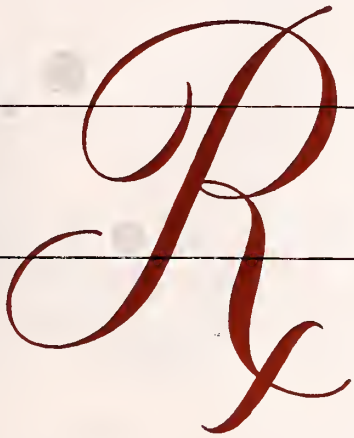
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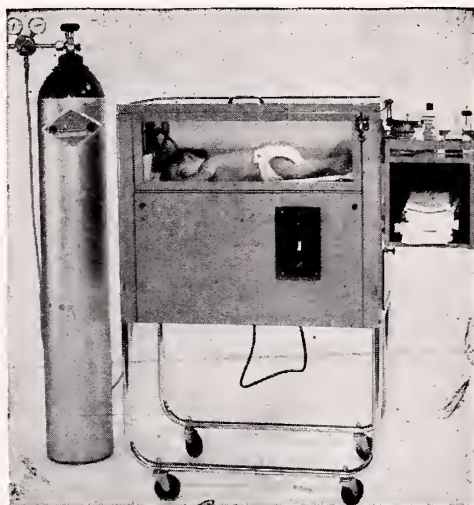


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